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<210> 407
<211> 1652
<212> DNA
<213> Homo sapiens
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<400> 407 tgeggeegee etegtggetg agtacetege cetgetegag gaccacegee acetgeeegt 60 gggctgcgtt tccttccaga acatctcatc caatgtgcta gaggagtccg ccatctccga 120 cgacatcctg tegecegacg aggaggett etgeteeggg aageaettea etgagetggg 180 gctggtaggg ttgctggaac aggcagccgg ctacttcacc atgggcgggc tctacgaggc 240 ggtgaatgag gtctacaaga acctcatccc catcctggaa gcccaccgtg actacaagaa 300 gctggccgcg gtgcacggca aactgcagga ggccttcacc aagatcatgc accagagttc 360 eggetgggag egegtgtteg ggaegtattt eegegtggge ttetaeggeg eecaettegg 420 tgacctggat gagcaggagt ttgtgtacaa ggagccatcg atcacgaagc tggcagagat 480 ctcacaccgg ctggaggagt tctacacgga gagatttggc gacgacgtcg ttgagattat 540 caaagactct aaccctgtgg acaagtccaa gcttgactca caaaaggcct acatccagat 600 cacgtatgtg gaaccgtact ttgataccta cgagctcaag gaccgggtga cctactttga 660 ccgcaactat gggcttcgca cattcctgtt ctgcacgccg ttcacgccgg atgggcgcgc 720 acacggggag ctgcccgagc aacacaagcg taagacgctg ctcagcaccg accacgcctt 780 cccctacatc aagactegca teegtgtgtg ccacegggag gagaeggtge tgaegeceag 840 tggaggtggc catcgaggac atgcagaaga agacacggga gctggccttt gccaccgagc 900 aggacccacc agatgctaag atgctacaga tggtgcttca gggctctgta gggcccaccg 960 tgaaccaggg tcccctggag gtggcccagg tgtttttagc agagatcccg gaaqaccca 1020 agetetteeg geateacaae aaattgegge tetgetteaa ggaettetge aaagaaatgt 1080 gaggatgcgc tgcggaaaaa taaggccctg attgggccgg accagaagga gtaccaccgt 1140 gagetggage geaactactg cegeetgegg gaggetetge ageceetget tacceagege 1200 ctgccccage tgatggcace caceccacee ggcctcagga actecttgaa cagagcaagt 1260 ttccgaaagg cagacctctg agcccacaag gaccaaagct gtacctagag gaaccagcac 1320 ccgggcctca gctgtctgtg ctgcgagggg agtctgccct ggtgcccact gggctgtggg 1380 gtgaccacac tgtacttggg gctgggccct ctgcccctgt gtccccatct gtgtgcactg 1440 atgetteete eettittaa titaaaatgg tittaaaag caaaaaaaaa aaaaaggggg 1500 ggccctttta aaggaaccaa ttttaacgcc cgggggttgg gaaggaaaaa tttttttaag 1560 ggggccccaa aattaaattc cggggccggg gtttaaaaac ggggggaggg gaaaaacccg 1620 ggggttaccc aatttaatcc ccttgggaaa ag 1652

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<210> 408
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<213> Homo sapiens

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                                                                      120
aacctggcct ggtggacctc tgctgccgcc tggtgagtcc tgagcgggag gtgggtagag
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aaggtgetee etggeeggga gggeteagaa gagaagtagg geatggeate gteetetget
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atgccgaa
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<211> 668

<212> DNA

<210> 409 <211> 1854 <212> DNA <213> Homo sapiens

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<210> 410 <211> 1147 <212> DNA <213> Homo sapiens

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	acggcaagta					840
	tcggtgggta					900
	cagagcactt					960
acctgaccag	tgggtcagca	ggcacggctg	gcagccttct	ctgccctgag	ggtcgaaggt	1020
	gggggtgtcc					1080
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aaaaaaa						1147

<210> 411 <211> 2234 <212> DNA

<213> Homo sapiens

<400> 411

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2234

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<210> 413 <211> 1042

<212> DNA <213> Homo sapiens

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<211> 474

<212> DNA

<213> Homo sapiens

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<210> 424

<211> 1453

<212> DNA

<213> Homo sapiens

<400> 424

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<210> 426 <211> 551 <212> DNA <213> Homo sapiens <220> <221> misc_feature <222> (1)...(551) <223> n = a,t,c or q

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<213> Homo sapiens

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<211> 413

<212> DNA

<213> Homo sapiens

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<210> 429 <211> 1567 <212> DNA <213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<210> 432 <211> 1908 <212> DNA

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<211> 1714
<212> DNA
<213> Homo sapiens
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cccgggagct gctggtggcc cgtccgcagg gtgactgctg gctgaccaac agctccagct
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                                                                    1500
ageettggae ggeeageeca geeceeatea geaacageaa gagaceeaga eecaceeggg
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gtccatccac cacaaacact gagggccgta cgacactctc ctccatgccc aaggtctctg
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<210> 434

<211> 478

<212> DNA

<213> Homo sapiens

<400> 434

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                                                                      120
etgggatagg gaccgctgtc cccgggtccc taccaatgtc gcccgtcgct cccggcccag
                                                                      180
etetaecege agagtetgat ggeageggee actetgagga egecaaetea ggtgagtgeg
                                                                      240
gegtetteec gteeteacac acetteecec acceaegtte taaagecate agtgaggge
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gcctgctcga gtccccgctg cccagggtcg gggacactga ggcgttcgtg ggtggggccc
                                                                      360
tttttttgac actgcgtgtg acgaggtgtg ggagagcgtg acaggcggaq gaaccggcgc
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<210> 435

<211> 1893

<212> DNA

<213> Homo sapiens

<400> 435

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                                                                      120
gagectegee ggeegeeatg tggagetgea getggtteaa eggeacaggg etggtggagg
                                                                      180
agetgeetge etgecaggae etgeagetgg ggetgteact gttgtegetg etgggeetgg
                                                                      240
tggtgggcgt gccagtgggc ctgtgctaca acgccctgct ggtgctggcc aacctacaca
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gcaaggccag catgaccatg ccggacgtgt actttgtcaa catggcagtg gcaggcctgg
                                                                      360
tgetcagege cetggeceet gtgeacetge teggeceece gageteeegg tgggegetgt
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ggagtgtggg cggcgaagtc cacgtggcac tgcagatecc ettcaatgtg teetcactgg
                                                                      480
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<210> 436 <211> 1968 <212> DNA

<213> Homo sapiens

<400> 436

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<213> Homo sapiens

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<210> 439 <211> 1689 <212> DNA <213> Homo sapiens

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<210> 440 <211> 1574 <212> DNA <213> Homo sapiens

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                                                                     180
gtegeggttc tttccggagg ccattgagtt cattgatgag gccttgtccc agaactgcgg
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ggtgctcgtc cactgcttgg cgggggtcag ccgttctgtc accgtcactg tggcctacct
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taacatctcc cccaacttca acttcatggg gcagttgctg gactttgagc gcagcttgcg
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<210> 441
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<211> 1102

<212> DNA

<213> Homo sapiens

```
<210> 442
<211> 1049
<212> DNA
<213> Homo sapiens
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1049

<210> 443 <211> 458 <212> DNA <213> Homo sapiens

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cttcgggttg tcaggccact ggaggatgga gctcttacag atccgctgcc gtagcctcaa
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atactgagaa tgctgtaaca ctggctccag caggataaat ataatcacat ccatgttctc
                                                                     240
atccattage ctctgcaaag ccaagtaaaa agetgtttta aagttecage tttttgcata
                                                                     300
ttttttggtt aaaacaaata ctgttttctt gctttggttg atgctctgca tgaggttgtc
                                                                     360
gatgatggcc aatcccgggt cccaatccct ctcctctaga caaaggagaa cgtttttgtc
                                                                     420
teggetetet teaaggtggt agegeagete atttatea
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<210> 444 <211> 1681 <212> DNA <213> Homo sapiens

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<210> 445
<211> 621
<212> DNA
<213> Homo sapiens
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<213> HOMO Saprens

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cggcaagatg cagecgacge agggaaacce cagaggaaat ttgggcagtg gegtetgeee
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tcagccccaa aaccaataag ccattcagtg tcctcagtca acttacggtt tgqaggaagg
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acaaccatga aatctgtcgt gtgcaaaatg aaccccatga ctgacgcggc ttcctgcggt
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tctgaagtta agaagtggtg gacccggcag ctgactgtgg agagcgacga aagtggggat
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gaccttctgg atatttaggt ggatgtcaat gtagatgaat ttctagtggt qgaaaccgtt
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ttctaataat gtccttgatt gtccagtgag caatctgtaa ttgatctata actgaattcc
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agettgteac aagatgttta taaattgatt tteateetge cacagaaagg cataagetge
                                                                      540
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ataatattag aaatgatacc g
                                                                      621
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<211> 468 <212> DNA

<213> Homo sapiens

<400> 446

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cttgagagat gt	ctatgccc ggagtato	at ggagatgctg	cgactgaaag	gcagagaaag	180
agcaagtact ag	gagcagcg ggggagat	ga tttctggttt	tgaattaatt	ttcaatttat	240
ttacaaaagc ta	tgtacaat taactaaa	at gataaagcag	tgatgtggat	ttctgtattc	300
tgatgatgag tc	tcttcaga gtactgct	ca tcttaattaa	tttttgctga	tatattgctt	360
catctactag aa	tatttcac atcaccta	ta acaactgcac	agtgttctga	cacatttgag	420
tgtccaaaat ag	ccaattaa cacaacca	aa tacaactggg	catgtatt		468

<210> 447

<211> 1030

<212> DNA

<213> Homo sapiens

<400> 447

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<210> 448

<211> 1936

<212> DNA

<213> Homo sapiens

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                                                                     120
geacaageaa egtggeeace aceaecttgt teetgeecat etttgeetee atgteteget
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ccatcggcct caatccgctg tacatcatgc tgccctgtac cctgagtgcc tcctttgcct
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tcatgttgcc tgtggccacc cctccaaatg ccatcgtgtt cacctatggg cacctcaagg
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ttgctgacat ggtgaaaaca ggagtcataa tgaacataat tggagtcttc tgtgtgtttt
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atgtgacaca tattgagact taggaagagc cacaagacca cacacacagc ccttaccctc
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ctcaggacta ccgaaccttc tggcacacct tgtacagagt tttqqqqttc acaccccaaa
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gcccagatgc agagatggtc atgggcagct ggagggtagg ctcagaaatq aaqqqaaccc
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ctcagtgggc tgctggaccc atctttccca agccttgcca ttatctctgt gagggaggcc
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aggtagccga gggatcagga tgcaggctgc tgtacccgct ctgcctcaag catccccac
                                                                     780
acagggetet ggtttteact egettegtee tagatagttt aaatgggaat eagateeeet
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geeteagate atetetgtea etetggaagg gacaceceag ceagggaegg aatgeetggt
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gcaggagaaa gtatgagagc ctcaggaaac cccatcaagg accgagtatg tgtctggttc
                                                                    1860
cttgggtggg acgattcctg accacactgt ccagctcttg ctctcattaa atgctctgtc
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```

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<210> 449
<211> 354
<212> DNA
<213> Homo sapiens
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tctaagccaa gatcactgaa tgagcggacg actgaggaca tatgctttaa gctcgaccca 180
ttcccatagc gacgctcatc actctgcttg catgctcttc aaccctcagc tgtcggctct 240
cgagctaccc cctcaatgtc atgcggcctc cttcccatcc gcccttcctc gccgctgctc 300
agtactccgc gttaggagac cttcgtactt agcggcccgc tccagagtac cgcc 354
```

```
<210> 450
<211> 1073
<212> DNA
<213> Homo sapiens
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<400> 450 ggaaacatca totacatgta catgoagoca ggagocaggt ottoccagga ccagggcaag 60 ttcctcacgc tcttctacaa cattgtcacc cccctcctca atcctctcat ctacaccctc 120 agaaacagag aggtgaaggg ggcactggga aggttgcttc tggggaagag agagctagga 180 aaggagtaaa ggcateteca eetgaettea eetecateea gggecaetgg cagcatetgg 240 aacggctgaa ttccagctga tattagccca cgactcccaa cttgcctttt tctggacttt 300 tgtgaggetg tttcagttct gacattatgt gtttttgttg ttgctcttaa aattgagacg 360 gggtctcact ctgtcaccta gggtggagtg cagtggtgcc accatagctc cttcgactat 420 tgggcttaag cgatcctccc ccacctcagc cttccaagta actgggacta caggtgtgca 480 tcactggcag tgggaattgt ggcttttctg tcttctatgg agacggggtc ttgcctgtgt 540 tgccccagge tggtcccaaa ccccctggcc tcatgtgatc ctcctgccat ggcctcctaa 600 agttctggga ttacaagtgt gagtcactgt gactggccaa cattatgtga tttatgtgtg 660 aacctatata acacaaatca toocccaaaa coccatootg gatotgtaaa gcagotgcca 720 aagaatgaag tgagagaaac agttgtaaag atgagtttcc caccctactt atacccagag 780 tgcctaagag gaaatcaact cttcctcaat cagagctttg cctttgtttg ttgttgtttg 840 cctttaaagt ctaacacacc tgacatgttt cagtcagaat gaccccaaat gcatcactgt 900 tctccacgtg gtcccaagtg cctctctgtt tagggccatc aaatcatgga atgcagcaca 960 gtttgatatt ttctatattc ccaattccta cccaaacctt ttcatgaaat cgtagagttt 1020 gttttaccct ttatctggtg taagattctg cataaaccaa gaagtgaacc tgt 1073

<210> 451 <211> 2674 <212> DNA <213> Homo sapiens

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gaatacttga attctggctg atggtgtaaa cagctctgca aacaatccct ttcataccac
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aatcccgtac tccttgccac cggcttccta gagcagcgta gacagctggt aaactgaaga
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                                                                    2400
gtcgtttctg tcagatttgt attgtttcca agggaaaagc ttgggggagg actcagttca
                                                                    2460
caaaatgcaa aactcaacga tcagattcac ggacccagag cttttccatg tgtttatatt
                                                                    2520
gtaaatattt ttgatttcat cgaaattatt tattcattaa aagaaatttt tgtgaagcac
                                                                    2580
agtgagtgac aatcattttt cttaaggcct ggaaacgatt ttctgtatga tgttacttta
                                                                    2640
tgtgaattet cateteaata aatgatgace egtg-
                                                                    2674
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<210> 452 <211> 601 <212> DNA

<213> Homo sapiens

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aagccagcaa gtctcgcccc acctaccagc ccccacccag cttcccaagg gtctcagagg
gacactettg gcactggcet ttcacatetg ttcaacaace cetgagetga aaagttgcag
                                                                      180
tgggaggcct ccagctcagc aggtggactc caaaataccc ctcttgtctt atccactcca
                                                                      240
ggtcgggggc agggaagcac atggggctgc ttctgccacg ttccctccac agccatcccc
                                                                     300
aaggccaggc acacaggcac catccaaggg cctgcccct agcagtgaga ctctagctct
                                                                     360
gtgagtctga gcagtgaggt cctgggggtg gcgggagccg agggtcctgc tgggttccgc
                                                                     420
tggggcaggt cctcggctgg gcacatgagc tgacggattc tctctctgaa ggggcccttg
                                                                     480
agggttccga gtctgtagag gctccaggca ggaatgcaga ccatggagga cagagccagg
                                                                     540
agccagccca gggcatcgcc ccaccacggg tacgtgtact tcttgttgta ggtcagcgga
                                                                     600
                                                                     601
```

<210> 453 <211> 474 <212> DNA <213> Homo sapiens

<400> 453

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gtaggggcag tgatggaggg tggctcaggc cagggggtgg acctgctcat tgcaggtaga 120
ccctgagtga gagtggggca ctcttctcc tgggtccacc ccctctctca ctcaagtcct 180

cttctgcccc	taggccttat	agcaccctgc	gagattgcct	ggagcacttt	gcagagttgt	240
ttgacctggg	cttccccaat	cccttggcag	agaggatcat	ctttgagact	caccagatcc	300
actttgccaa	ctgctccctg	gggcagccca	ccttctctga	cccccagag	gatgtactcc	360
tggccatgat	catagecece	atctgcctca	teceetteet	catcactctt	gtagtatgga	420
ggagtaaaga	cagtgaggcc	caggcctaag	gggccacgag	cttctcacaa	ccat	474

<210> 454 <211> 1838 <212> DNA <213> Homo sapiens

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<210> 455 <211> 1790

<212> DNA

<213> Homo sapiens

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                                                                       60
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                                                                      120
tgctttctct gctctcttgt ctttaggagc cgggtgtggg ctgagccctg cctgattgat
                                                                      180
gctgccaagg aggagtacaa cggggtgata gaagaatttt tggcaacagg agagaagctt
                                                                      240
tttggacctt atgtttgggg aaggtatgac ttgctcttca tgccaccgtc ctttccattt
                                                                      300
ggaggaatgg agaaccettg tetgacettt gteaccecet geetgetage tggggaeege
                                                                      360
teettggeag atgteateat ecatgagate teecacagtt ggtttgggaa eetggteace
                                                                      420
aacgccaact ggggtgaatt ctggctcaat gaaggtttca ccatgtacgc ccagaggagg
                                                                      480
atetecacea tectetttgg egetgegtae acetgettgg aggetgeaac ggggeggget
                                                                      540
ctgctgcgtc aacacatgga catcactgga gaggaaaacc cactcaacaa gctccgcgtg
                                                                      600
aagattgaac caggcgttga cccggacgac acctataatg agacccccta cgaqaaaqqt
                                                                      660
ttctgctttg tctcatacct ggcccacttg gtgggtgatc aggatcagtt tgacaqtttt
                                                                      720
ctcaaggcct atgtgcatga attcaaattc cgaagcatct tagccgatga ctttctqqac
                                                                      780
ttctacttgg aatatttccc tgagcttaag aaaaagagag tggatatcat tccaggtttt
                                                                      840
gagtttgatc gatggctgaa tacccccggc tggcccccgt acctccctga tctctcccct
                                                                      900
ggggactcac tcatgaagcc tgctgaagag ctagcccaac tgtgggcagc cgaggagctg
                                                                      960
gacatgaagg ccattgaagc cgtggccatc tctccctgga agacctacca gctggtctac
                                                                     1020
tteetggata agateeteea gaaateeeet eteeeteetg ggaatgtgaa aaaaettgga
gacacatacc caagtatete aaatgeeegg aatgeagage teeggetgeg atggggeeaa
atcgtcctta agaacgacca ccaggaagat ttctggaaag tgaaggagtt cctgcataac
                                                                     1200
caggggaagc agaagtatac acttccgctg taccacgcaa tgatgggtgg cagtgaggtg
                                                                     1260
geccagacce tegecaagga' gaettttgea tecacegeet eccageteea cageaatgtt
                                                                     1320
gtcaactatg tecageagat egtggeacee aagggeagtt agaggetegt gtgeatggee
                                                                     1380
cctgcctctt caggctctcc aggctttcag aataattgtt tgttcccaaa ttcctgttcc
                                                                     1440
ctgatcaact tcctggagtt tatatcccct caggataatc tattctctag cttaggtatc
                                                                     1500
tgtgactett gggcetetge tetggtggga acttacttet etatagecca etgageceeg
                                                                     1560
agacagagaa cctgcccaca gctctccccg ctacaggctg caggcactgc agggcagcgg
                                                                     1620
gtattctcct ccccacctaa gtctctggga agaagtggag aggactgatg ctcttcttt
                                                                     1680
ttctctttct gtcctttttc ttgctgattt tatgcaaagg gctggcattc tgattgttct
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tttttcaggt ttaatcctta ttttaataaa gttttcaagc aaaaaaaaa
                                                                     1790
```

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<210> 456
<211> 1293
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1293)
<223> n = a,t,c or g
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<400> 456
tgcgcaagcg ggagttccgg ctggagaccc gtgctctggg ccggcgcctt caccatggcc
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teggeagage tggaetaeae categagate eeggateage eetgetggag eeagaagaae
                                                                      120
agccccagcc caggtgggaa ggaggcagaa actcggcagc ctgtggtgat tctcttgggc
                                                                      180
tggggtggct gcaaggacaa gaaccttgcc aagtacagtg ccatctacca caaaaggggc
                                                                      240
tgcatcgtaa tccgatacac agccccgtgg cacatggtct tcttctccga gtcactgggt
                                                                      300
atcccttcac ttcgtgtttt ggcccagaag ctgctcgagc tgctctttga ttatgagatt
                                                                      360
gagaaggage coetgetett coatgtette ageaacggtg gegteatget gtaccgetae
                                                                      420
gtgctggagc tcctgcagac ccgtcgcttc tgccgcctgc gtgtggtggg caccatcttt
                                                                      480
gacagegete etggtgacag caacetggta ggggetetge gggeeetgge agecateetg
                                                                      540
gagegeeggg eegecatget gegeetgttg etgetggtgg eetttgeeet ggtggtegte
                                                                      600
ctgttccacg tcctgcttgc tcccatcaca gccctcttcc acacccactt ctatgacagg
                                                                      660
ctacaggacg cgggctctcg ctggcccgag ctctacctct actcgagggc tgacgaagta
                                                                      720
```

gtcctggcca gagacataga acgcatggtg gaggcacgcc tggcacgccg ggtcctggcg 780 cgttetgtgg atttegtgte atetgeacae gteagecaee teegtgaeta ecetaettae 840 tacacaagec tetgtgtega etteatgege aaactgggte egetgetgaa ggeeattget 900 ccatctcacc tetgetecca gaaaataaat geeetgaaac eeteeeeca naacetgeaa 960 tetgteggge actetteteg tteaactece tgtageeett tgggaetttg eggteeeeta 1020 agtagaaaat teetatggge etgteteetg ggggeetetg tetgetggtg gtetgettae 1080 cacagaatee taaggggeag gagtgeetgg geatgtgtet gtgggageet tgeagteagt 1140 tgtgtttgga caagtgcaac agtcaggctg ctgattcctg tggcatgcag gctgtagagg 1200 ttgacaaatg gagggggtg ttgagggtga gccctagttg atttttaaa atttaaactc 1260 tggtaagaac atttaatatg aaaaaaaaa aaa 1293

<210> 457 <211> 1155 <212> DNA

<213> Homo sapiens

<400> 457

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<210> 458 <211> 1297 <212> DNA <213> Homo sapiens

<400> 458

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aqtattaqaa gtaaagggaa cacacagcta aaaqttttac tttaatcaca aattcacaac 300 tagagatatc atttgcatat cttagaacgc taaaqacctg ttaaaatttt ttaaccaatc 360 agcaaaaata tgtgccccac agatttctaa tgttcataat ttagaattta tcacatataa 420 tatttattaa tagtttattt gcaaaattat tattcttaaa acacttcttt ccaacacatt 480 tacaatgttc atgtgtttta aagaaaaaaa ccaccctcat ttaaaaatgt actactgact 540 ttaatgtgtg gttataccag tgccaccaaa ttagaaaaga aaaagaaaca tacagctgta 600 ttggatatgt agttactact acaaataatg acaacacacg tcctatacaa agatcatatt 660 cacgcttttc taccacttct cagtcattgt cagaaccatt tggaggtaag aaaaccaatg 720 catcattgaa aatatggccc aaatgcccta aggcggtata ccccatacat catcacatgc 780 atctgatttg gagtcagtcc attaaaagta acagccatat ctgaacaaca gccttctact 840 acctggttgg ggtgataagt cattgcctct ttaatagaaa gcccaacaga tttggtatta 900 aatacatctt ttccatcagc atcttctgca ttttctgcaa atactccagc atatttcagg 960 caaactgeta getgtttate tteagatate ttecaaatea teecteectg tteaggacae 1020 ttttctggga tattgagaag gctgttaagt cttttcattg attctacact taagacaatt 1080 ceteetteea tacceacata tteaaggtet eeagatttta tagtgtggee tagatagaaa 1140 ggctgtgatg gatccttttt taacaaaaaa tactttaggt tttcaatgat agcaaacgta 1200 gtggggcgtg caaggaagaa ccagttgtat tggtctctat acttacaaat acgcctttga 1260 taagtataga gaccaataca actggttctt ccttgca 1297

<210> 459 <211> 777 <212> DNA <213> Homo sapiens

<400> 459 ttttttttt ttctgaagaa gcatttatta gcatgcaggg cccatgctag aggctcctta 60 tttccagggc aaggccagcg agacagagcc cattgctcag gacgcagccc agattgcaaa 120 gagaggacag cccatggtag cggaagaaat tetggeggag agcaetgtae ttggggteet 180 tetetegeag etggeggtag ggategggae cetggtgget geetggtace tececaceca 240 ggcctcgctc cttctccacg gtttgcaggg cccacatggc agctgtggtg cggggttcca 300 gccagcgggc gttgacagtg gccagcgtaa ggctcaggaa cagcaggtaa agctggctgg 360 cctcccagaa tgtgagctga gcccaagcat gctgtgaagc caagatgcag aggttgatga 420 aggcacagcc catggagatg tggaagtaga aggggaagag tttgctctgc actagtccga 480 aggtatgtcg gggaaggctt cggaaaagca ggaagcctga gacgaaggtc acccacattt 540 gcatgcccca ggcacctgac aagaccagta gatggaccat cttaatcagg cctcctaggt 600 tecegeette etecatettg cagteegtta ggaaceggga ceteaateeg cageaceegg 660 attccgagaa cagaggcgtc ggggccaaat gggctgaatc tggtacctca ctcccacgcc 720 cccgggtgga cagcgaccet cetcggccgc gtcccetcgt gggtttcccc tcgtgcc 777

<210> 460 <211> 859 <212> DNA <213> Homo sapiens

<400> 460

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gctgttgagc ttgtcggtat tgaggttctc aaagaccagc ttttcctgca gctgccgaaa 180

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atcgagcttg	gactgggcca	tcttctcagg	ctcggaggtc	gcctggcctg	cgaggtcagg	360
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gggggccgcc	cccctgaggt	gccacacgcg	gccccagcgc	agtcccaagt	ttcccaagtg	660
tgagcgggga	ttggggcgga	cctgtggagg	caggaagggc	gggcagcagg	gcagagggag	720
agccagggcg	cgcccttgct	ccctccctcc	tttgctccct	ccctccccgg	tttgcaggct	780
ctcaggctct	cgggctcccc	tgggctgtga	cggctgagcg	gtggcaggag	ctgagagcga	840
gtgagctacg	aaatcgtcg					859

<210> 461 <211> 1975 <212> DNA

<213> Homo sapiens

<400> 461

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<210> 462
<211> 716
<212> DNA
<213> Homo sapiens
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<400> 462

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cctggggtgg	aggggggtga	aggcacccag	aaacctcggg	actacatcat	ccttgccatc	180
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tcccggaaca	gcctgcagca	gggggacgtg	gacggggccc	agcgtctggg	ccgggtagcc	300
aagctcttaa	gcatcgtggc	gctggtgggg	ggagtcctca	tcatcatcgc	ctcctgcgtc	360
atcaacttag	gcgtgtataa	gtgaggggct	ctgccccgca	tcccaagact	tttcttcctg	420
ttgggagctg	ccttgggccc	attccctccc	ctggggggag	cccaactgat	ggccctggcc	480
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tccaacctcc	ctgcactaat	gcctgcatcc	cctccggcct	cttggccccc	tatecetgea	660
cttctgggaa	acctccctgg	cactctggga	aacctccctg	gaacaacttc	ccaaat	716

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<210> 463
<211> 595
<212> DNA
<213> Homo sapiens
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<400> 463

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acaaagactt caggtaaatt atagtacttc catgttagct gtgcatgtcc accacgcttt
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gtctgtaact cgagtagaaa aagatgttgt gttttaatta atcattcctt acaattcaag
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cttcctgtaa ttgacagcct tgccttgttc ctcatggcat cattcaaggt catcttaaat
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<210> 464
<211> 2017
<212> DNA
<213> Homo sapiens
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<400> 464
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gtggcacgag gtcctgcagg ctgcaggacc ctcacactcc agccccgtct ggtgacccaa
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cccgggcccg tggtgcatgc tggggaaggc cactggccgg cccctgggct tcggctcctg
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gacatgggag ccagggaget gggaccgccg cacccctccc ctgcctccct cctggggtca
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ccaccctcag gcggctgcca gctggcctag gacgcggcgg aactgctggg tgctgtggcc
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geeggtgetg gaggeegaea ggegettgee etetgeeggg getteaegtt cagetggggg
                                                                    1860
aggcacegea tacacaceae tgtegaceae gecaceatea gecaceteag gaggaageae
                                                                    1920
cegtteaegg ggcacategt acagggtgce egggceagge egecgcaage cagggggcac
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<210> 465
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<400> 465

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gatggaggaa cctcagaaaa gctatgtgaa cacaatggac cttgagagag atgaacctct
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cctggttaac cccaccacct tgaactgtgg gcacagcttc tgccgtcact gccttgcttt
                                                                     480
atggtgggca tetteaaaga aaacagaatg teeagaatge agagaaaaat gggaaggttt
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ccccaaagtc agtattctcc tcagggatgc cattgaaaag ttatttcctg atgccattag
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actgagattt gaagacattc agcagaataa tgacatagtc caaagtcttg cagcctttca
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gggagggga ttcttttccg gtgtgctcac agctttaact ggagtggcag tggtcctgct
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cgtctatcac tggagcagca gggaatctga acacgacctc ctggtccaca aggctgtggc
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caaatggacg geggaagaag ttgteetetg getggageag etgggeeett gggeatetet
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<211> 1575

<212> DNA

<213> Homo sapiens

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                                                                    1080
taaggetgtg aacceaggea ggteeetgtt cetgetatac geeetcaaga geteeecag
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getgagtetg etetacetgt acctgtttga etacacegae accttectae ettteateca
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caccatctgc cctctgcaag aagacagctc tggggaggac atcqtcacca aqcttctqqa
                                                                    1260
tettaaggag cetaegtgga ageagtggag agagtteetg gteaaataet cetteettee
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ataccagctg attgctgagt ttgcttggga ctggttggag gtccattact ggacatcacg
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gtttctcatc atcaatgcta tgttactctc agttctggaa ttattctcct tttggagaat
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ctggtcgaga agtgaactga agtaagtatg ttttaatggt tgtcacaaca ggggatggga
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<210> 466

<211> 493

<212> DNA

<213> Homo sapiens

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	gcccaacttc					180
	caaatttata					240
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<210> 467 <211> 1572 <212> DNA <213> Homo sapiens

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<210> 468 <211> 1927 <212> DNA <213> Homo sapiens

<400> 468

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<210> 469 <211> 1013 <212> DNA <213> Homo sapiens

<400> 469

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<210> 470 <211> 1543 <212> DNA <213> Homo sapiens

<400> 470

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<210> 471 <211> 1154 <212> DNA

<213> Homo sapiens

<400> 471

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<210> 472 <211> 5202 <212> DNA <213> Homo sapiens

<400> 472

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<400> 477

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3652

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<211> 2477

<212> DNA

<213> Homo sapiens

<220>

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tetteageet eccaagatge taggaetaea ggtgeatgte aacatgeeea getaattggt
                                                                      180
ttttttttt tttgtagaga cagcatctcc ccaggttacc catgctggtc caaacacctg
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                                                                      300
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gtttcattaa tttcctctat tctttttcca ttctccattt tatttatgtc cactctaatc
                                                                      480
cttattattt ccctcattca ctgtgcttgg gtttagtttg ttcttctttc atatcctgaa
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<211> 1570
<212> DNA
<213> Homo sapiens
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<213> Homo sapiens
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<210> 483 <211> 3024 <212> DNA

<213> Homo sapiens

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<211> 1228

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

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<223> n = a,t,c or g
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<212> DNA
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<223> n = a,t,c or g
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<212> DNA
<213> Homo sapiens
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  aagaagctgt tggagatgct gcaggagtgg ctggccagcc ttcccctgga caggatcccc
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  300
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<213> Homo sapiens

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<211> 498

<212> DNA

<213> Homo sapiens

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     <213> Homo sapiens
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tatgtatatg catgcatgct ttgtagttct ctgggtgaaa agatctcaca ccaatgtaca
                                                                   480
taatgtggcc atcetttcca ttttcaagaa gttgccttgc tttgatactg caaattcagt
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572

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<211> 1642
<212> DNA
<213> Homo sapiens
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<211> 2629
<212> DNA
<213> Homo sapiens
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<212> DNA
<213> Homo sapiens
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<210> 503 <211> 1586 <212> DNA <213> Homo sapiens

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<210> 505 <211> 1284 <212> DNA

<213> Homo sapiens

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<210> 506
<211> 1757
<212> DNA
<213> Homo sapiens
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<211> 618
<212> DNA
<213> Homo sapiens
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<210> 509

<211> 2355

<212> DNA

<213> Homo sapiens

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<211> 775
<212> DNA
<213> Homo sapiens
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ctacagggta agtatattt atgtgatatg cttcttttga tcaacttttc tcccttcact 240
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			actggctatt			420
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<210> 511 <211> 1553 <212> DNA <213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<400> 513

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<211> 963
<212> DNA
<213> Homo sapiens
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<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
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<223> n = a,t,c or g
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<210> 515

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777

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2966

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<210> 529 <211> 1998 <212> DNA <213> Homo sapiens

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ttttgggaaa tacccaagtc ttccttgtct ctcaggaaaa acacatttaa attcatcctg
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tactaactac agatagaaga acagcagtat taccatgtgt attgcagcac tgcagttcac
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tttctggatt tgtgacacac aaacacatca tgtgacgtcg catgcacgcg tkkgcttggg
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ccaagcagca gcaggttgag cggcgacgtg aaaatctcat gcagcagccc gccgctctcc
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agategettg ggteggegee agtegeeace acatectegg cagecatgat etetggagta
                                                                    1920
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<210> 530 <211> 766 <212> DNA

<213> Homo sapiens

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tgccactgtg tttgccagct ctcccaagtg aaaagaacac tttttataaa aaaattaatt
                                                                     180
getecaagtt tteaggeeca ggggaggete teccattete etectteaat aagteeegte
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caggtaagag gtgatcttgt ggataaattc atcatacttc actttqccat tqqqttcqat
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atctgccttc cctgaagaga tcatcccact tccttgtggg tgagcttctc ccccagactc
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gtgagttttg accgcaggtc ggacgccatg acgtaacctt tcttctctt gtccaccatc
                                                                     420
aacatggcta gaagaatttc tttctttggg tcttcttgtt ttatttgcat gtgcataatg
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gtcagaaaag tggagaaatc cagctctcca tttccgtcta tcccgtgggt ctgcagqtqc
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cgctgcacct cccctggcgt cgggctggcc cccaggcacc tcatggccac catgaggtcg
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gtggctttta tcttccccct ctgctgcttg tcatacaggg agaagcattc cttgtactca
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ttaatttggt cttgggaaag aaacttggcc attctggggc ctcagctgct acccgtgggc
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<210> 531 <211> 1891 <212> DNA <213> Homo sapiens

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		cctgcagctc				360
acccgcagtc	agctgagcgc	gctggagcgg	cgcctgagcg	cgtgcgggtc	cgcctgtcag	420
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		actcaaggct				540
aaggtggccc	agcagcagcg	gcacctggag	aagcagcacc	tgcgaattca	gcatctgcaa	600
agccagtttg	gcctcctgga	ccacaagcac	ctagaccatg	aggtggccaa	gcctgcccga	660
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		ccaggagctg				780
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		ggccggccag				1140
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		ggtcgagagc				1800
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ccaaatttaa	ggcaagggtc	ccaatgctgc	tcttctgtgt	gatactgggt	acattgtgtc	420
ccaggtgctc	ctgcaggagt	cattccacca	aaggatgtac	acatgtttt	cccatggcca	480
cagctggagt	ggggaagcac	agcctgctgg	aggcagcccc	agtgggattt	agcttctgcc	540
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ctccgtggat	gaagagcttt	gtccctgctg	ccaccatcac	atgaccatgc	cggggagatg	660
gaggatttcc	aagtgtctct	ggctgtgacc	aggtcagagt	gtttgcgtca	aacacatgca	720
gcttcgtgtc	ctgcacgggc	tgggcacctc	teteteegee	cccaaagaca	tatagctggt	780
		gtgtggaatg				840
		gtttcaggat				900
		acccagatac				960
		aggcccttgc				1020
		gagaagcttc				1080

<211> 1381 <212> DNA

<213> Homo sapiens

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                                                                    1200
caggttccaa gactggcagt tgcttcatgg tgtcctgcgg cctaggccac tgacagctgt
                                                                    1260
ccccaaagtc cagagctcag ttaggctggc ttcacgtggg cgggacctcc cgcaqcaqcc
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geogetacea geocageaaa teteateeee aegtggeagt tetgeggega ettaggecag
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<210> 533 <211> 1986 <212> DNA <213> Homo sapiens

<400> 533

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gtcttgaact gagatatgta tgtaaaggtt ctatcacatt ggcatataac atgtqctcaa caaatgaaag ctataattat ttatttccaa agagtttaaa qattaaactt ccctcaaaac aaacaaaagg caaggtaaca tcccaagctg tgaggggctg agtctctcct aggtgcaggg cagcacagga actggctgca caaggccaga gaggttacgt qqcqqctctc ttcaaattaq accacacaga gegetteatt ecetgtgeag tetteacate tteccagtee agtttgaegt ctggaacctc atcttctggc tctggatcct tcctcaaggg cccccggggg gacgcaacca caatgggcag agggccacat tcctcccgga tttccacaac atggaggccc ttcttatcag ccagctgttg atgggtttcc tgtctggaga gcccacggaa gaggccctgg gtgaggctga gcatattaat ggacccagag accttggcat acatgtcttt gatgccaatg agccggcaga tggtgatgat ggccctgtgg cagcggaggc cgtaaccttt gggttgtttc ttcatcttga tatgcgtcct tttaaatctt aatgaaatat catggaatat tgtatggtct tcatatcgtt ctatataatg caaatggtga actgctctgt tctttgcttt cctgaaagca tccatccgat cagtagettt cccaatagaa aaacctcaag tatcetggta tcaaaatcet catatgttte tccacaggga ccagggtcag gggggccaag actgatgcct ccccatgagt ttccactcca testegetes egittaacet teatettett ettteggtes castettets tetgetqqat catgitetgee tecacettet cetgetette ettgetett tgggcaatgg tetgeactge tccatttttc ataagaggga cattcagtcc gggccataga aaaccataac gcccttcacc aatgatctga cccctgttca gatcctttct tttcttcttt ttagttcttt tgcctcttcc tttttttgct ccagcaccag tctctgctaa agcgcctttc cacagctcat ctgcagtcaa

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120

180

240

300

360

420

480

540

600

660

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840

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960

1020

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1440

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1560

1620

1680

1740

1800

1860

1920

1980

1986

<210> 534 <211> 1891 <212> DNA <213> Homo sapiens

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                                                                     120
tggaacccca acgtccccga gagtccccga atccccgctc ccaggctacc taagaggatg
                                                                     180
                                                                     240
ageggtgete egacggeegg ggeagecetg atgetetgeg eegeeacege egtgetaetg
                                                                     300
agegeteagg geggaeeegt geagteeaag tegeegeget ttgegteetg ggaegagatg
                                                                     360
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accegeagte agetgagege getggagegg egeetgageg egtgegggte egeetgteag
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                                                                      720
                                                                      780
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tttgaaatcc agcctcaggg gtctccgcca tttttggtga actgcaagat gacctcagat
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gaageetaca aggeggggtt tggggateee caeggegagt tetggetggg tetggagaag
                                                                     960
gtgcatagca tcacggggga ccgcaacagc cgcctggccg tgcagctgcg ggactgggat
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                                                                     1080
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gccaagagcc tctctggagg ctggtggttt ggcacctgca gccattccaa cctcaacggc
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                                                                     1380
                                                                     1440
gcagaggcag ceteetageg teetggetgg geetggteec aggeecacga aagaeggtga
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etettggete tgeeegagga tgtggeegtt ceetgeetgg geaggggete caaggagggg
ccatctggaa acttgtggac agagaagaag accacgactg gagaagcccc ctttctgagt
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                                                                     1680
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gagggaccac ttggggccag ccagactggc ctcaatggcg gactcagtca cattgactga
cggggaccag ggcttgtgtg ggtcgagagc gccctcatgg tgctggtgct gttgtgtgta
                                                                     1800
                                                                    1860
ggtcccctgg ggacacaagc aggcgccaat ggtatctggg cggagctcac agagttcttg
                                                                     1891
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<210> 535
<211> 1874
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<212> DNA

<213> Homo sapiens

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                                                                     180
agecttgatg acceegggaa eeggggeeee accegegeet ggtgaettet eeggggaagg
                                                                     240
gagecaggga etteeegace ettegecaga geecaageag eteeeggage tgateegeat
                                                                     300
gaagcgagac ggaggccgcc tgagcgaagc ggacatcagg ggcttcgtgg ccgctgtggt
                                                                     360
gaatgggagc gcgcagggcg cacagatcgg tgcgtgggga gggttgggcg ttcctgaccc
                                                                     420
cgactgggag gtcagcccga gagactttgg gtccctgggg gtgcgacggt gccccactac
                                                                     480
cagcaccggc cccagggtgc cccaccgctg tgggctgcca ccctcacgcg tacccccaca
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taccaggggc catgctgatg gccatccgac ttcggggcat ggatctggag gagacctcgg
                                                                     600
tgctgaccca ggccctggct cagtcgggac agcagctgga gtggccagag gcctggcgcc
agcagettgt ggacaageat tecacagggg gtgtgggtga caaggteage etggteeteg
                                                                     660
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                                                                      780
caaagectee aagacectae caaggettet ecceaecetg etecceagea cagtteteee
                                                                      840
cacecegtte eccageaeag egettgggge ecctetgget ecagaeeagg eccettggag
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caggaaaaag atccactgat ggaattcaga cccctttccc cttgggtccc cagacagctc
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ecccaaggga ggagetgagg aettecetee etetgeecea ageettgttt eeccaaggae
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aggtaccaac ctectecect actgacaett etcaaccaag aaaaetteet ttecatteee
                                                                     1080
teaccagetg ggeaceceta tagetgetta aataetttee aaatecaget geactectag
                                                                     1140
ccagggaagg tgaagggatg cacagaggtg ggggaggggt actgtgcagg gtactcagca
                                                                     1200
tecetgaeca ccaggtgeca atgateageg gaegtggtet ggggeaeaca ggaggeaect
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gegecaegga teagteattg atecaggttg atgatggaga ecetggecag aateaetaaa
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cactgggcct gggccgaaat catcagtgga actttgatta ggatcataaa atgggaagtt
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ggtcaaaatc acagatggct ggcggggcac ggtggctcac acctgtagtc ctagcacttg
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                                                                     1800
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ctacaaaaaa aaaa
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<210> 536 <211> 704

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<211> 649

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens
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<212> DNA
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<210> 563

<211> 521

<212> DNA

<213> Homo sapiens

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<211> 840

· <212> DNA

<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 569

<211> 1207

<212> DNA

<213> Homo sapiens

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<210> 571 <211> 2219 <212> DNA <213> Homo sapiens

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<210> 572 <211> 1671 <212> DNA

<213> Homo sapiens

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	ctgctggccg					120
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ccatgatact	tctcgaagac	tgaactttga	ggaagccaaa	gaagcctgca	ggagggatgg	240
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aaacctcttg	ccatctgatg	gtgacttctg	gattgggctc	aggaggcgtg	aggagaaaca	360
aagcaatagc	acagcctgcc	aggaccttta	tgcttggact	gatggcagca	tatcacaatt	420
	tatgtggatg					480
tcagccatcg	gcacccgctg	gcatcggagg	cccctacatg	ttccagtgga	atgatgaccg	540
gtgcaacatg	aagaacaatt	tcatttgcaa	atattctgat	gagaaaccag	cagttccttc	600
	gaaggtgagg					660
	gccaaaaaaa					720
	cccagcattc					780
	tgtagaaaaa					840
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	tatgagttct					1140
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	gtctggcaca		_			1440
	ggacagagct					1500
	ttttccttgc					1560
	caaagcccac					1620
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<210> 573 <211> 1612 <212> DNA <213> Homo sapiens

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cagagaatat agatgaaatt ttaaacaatg ctgatgttgc tttagtaaat ttttatgctg
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actggtgtcg tttcagtcag atgttgcatc caatttttga ggaagcttcc gatgtcatta
                                                                      420
aggaagaatt tecaaatgaa aatcaagtag tgtttgecag agttgattgt gatcagcact
                                                                      480
ctgacatagc ccaqagatac aggataagca aatacccaac cctcaaattg tttcqtaatg
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aagatgtatt aatteetgga aaacteaage aattegtatt tgaettacat tetggaaaac
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tgtgtatttt tattttgaat aaacagaaag aaattttggg tttttaattt tttttctccc
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<210> 574
<211> 928
<212> DNA
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<213> Homo sapiens

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                                                                  180
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                                                                  420
attectgacg cagggetgee tteagattag tgeattetet cecacatete aacgetacea
                                                                  480
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cacaagcaat aacagattca tagatcagtt gacattggct ggtctccagg acaggaatgt
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aceteatget gtagatgegg ateageeeet eegggaetgg eeetggggge tggetteetg
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cagagcagcg atggaggggg acagggaaag gagaggctag cggacgcgtg ggtcggcccg
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<211> 1116
<212> DNA
<213> Homo sapiens
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<210> 576
<211> 3246
<212> DNA
<213> Homo sapiens
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<400> 576

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                                                                     360
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<211> 2393
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<213> Homo sapiens
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<213> Homo sapiens

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<213> Homo sapiens

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                                                                      240
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cccgcagctg ctctggagac ttggctctgg gcgtctcgtg gcccaagtgc tccaagttgg
                                                                      360
                                                                      420
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<211> 1132

<212> DNA

<213> Homo sapiens

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                                                                      960
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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
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<213> Homo sapiens

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<210> 599 <211> 716 <212> DNA

<213> Homo sapiens

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ccgtgcgtcg gcccagctcg tccagcaccg ccttctcctt ctggaacatc tgctgccact
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ctgcctccgt gccgtgtgtg aatcccagca agtgacagag tccgtgggtg gccgtcacag
                                                                     300
tcaggacgtc attgtaatct tcattttctt tacactgatg gaagatatac tccactccta
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ggaaaatgtc tcccaaattg tagtcatctg gaaaatcagg ctggggaaat tcacctgctt
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teagatgete atgaaatgga aaagaaagea categgttgg gacattteta tetetgtaga
                                                                     480
ttctattaat gtgctgaata ttcttgttgt caacacagat gatccccagg tcaaatttct
                                                                     540
gcactcctaa aatcctcctt acaatctcga tcttactgcg aagtggcgct ctcctgatgg
                                                                     600
ggatgactcg ctgcagattt ctaatcacca aactcatttc aggaaqaata accaqccctt
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<210> 601
<211> 859
<212> DNA
<213> Homo sapiens
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<223> n = a,t,c or g
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<400> 601

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agcatcaagg	tgttgctcca	gtcggctctg	agcctgggcc	gcagcctgga	tgcggaccat	180
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	aagcatcaga					360
	gaggccgagc					420
	tgcttataga					480
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tggggatctt	caaaccaaga	tagatggctt	ggaaaagact	aactcaaagc	ttcaagaang	780
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<210> 602

<211> 2047

<212> DNA

<213> Homo sapiens

<400> 602

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<210> 603
<211> 1927
<212> DNA
<213> Homo sapiens
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<210> 604
<211> 630
<212> DNA
<213> Homo sapiens
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<400> 604

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taggtgcaga atcaatattg	ttaccgttca	ctgaacagct	attttcaaat	gtacaagatg	540
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<210> 605

<211> 783

<212> DNA

<213> Homo sapiens

<400> 605

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<210> 606

<211> 2513

<212> DNA

<213> Homo sapiens

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atttatgggt gattttgtag acagaggtta ctatagtttg gagaccttca cttaccttct
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tgcattaaag gctaaatggc ctgatcgtat tacacttttg cgaggaaatc atgagagtag
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acagataaca caggtctatg gattttatga tgagtgccaa accaaatatg gaaatgctaa
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tgcctggaga tactgtacca aagtttttga catgctcaca gtagcagctt taatagatga
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<210> 607
<211> 768
<212> DNA
<213> Homo sapiens
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<210> 608 <211> 698 <212> DNA <213> Homo sapiens

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<210> 609 <211> 1256 <212> DNA <213> Homo sapiens

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<210> 610
<211> 417
<212> DNA
<213> Homo sapiens
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<210> 611
<211> 886
<212> DNA
<213> Homo sapiens
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<221> misc_feature
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<223> n = a,t,c or g
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<210> 612
<211> 597
<212> DNA
<213> Homo sapiens
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<210> 613 <211> 1163 <212> DNA <213> Homo sapiens

<400> 613

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<210> 614 <211> 2428 <212> DNA <213> Homo sapiens

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<212> DNA
<213> Homo sapiens
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<210> 625 <211> 583 <212> DNA <213> Homo sapiens

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<210> 627 <211> 1906 <212> DNA <213> Homo sapiens

value nome baptem

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<210> 628 <211> 1775

<212> DNA <213> Homo sapiens

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gtgtctcage ctggagagtg egegeaeege egecegggea geegetgget eeageteaeg
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aaacagcccc gggcgccgcg ccgctctgag tccagcctcc tactgagaac agtccctccc
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ttgtgcgggt cgcacggcta gccgcaggtt cggccacgtc aaatccattt tctaaaaaaag
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cccgggtgag gagcgtcctg agactaagga aagagcctgg aaaatggagc agacctggac
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gagagattat tttgcagagg atgatgggga gatggtaccc agaacgagtc acacagcagt
                                                                      540
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                                                                      600
cagatetgga gaagtggtga aaaggteeeg tttgtgeaga catatteett gagageattt
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gagaaacccc ctcaggtaca gacccaggct cttcgagact ttgagaagca cctcaatgac
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ctgaagaagg agaacttcag cctcaagctg ctcatctact tcctggagga gcgcatgcaa
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cagaagtatg aggccagccg ggaggacatc tacaagcgga acactgagct gaaggttgaa
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                                                                    1440
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agageaagtt gtetgetgtg gtetgaatgt ttgtgteeca tececacete cetececeae
                                                                    1680
cagtttatat gttgaaatct taacccttaa ggttaatact tctgcctcca gaagtattat
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gaggtggagc cattaggagg tgattaaatc ataga
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<210> 629
<211> 1114
<212> DNA
<213> Homo sapiens
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                                                                      120
cetectecte etcegggtee eegecagea eecetegeae eaggeggegg eggeggagga
                                                                      180
ggagagetag accegeegee ggggeacaac atggeggage ceteggeece ggagageaag
                                                                      240
cacaagtegt cecteaacte gteeeegtgg agtggeetea tggeeetggg aaacageegg
                                                                      300
caeggceace aegggeeegg ggeeeagtge gegeacaagg eggegggegg egeggegeeg
                                                                      360
cegaageegg ceceggegge gtgeteaegg ggggetgteg cageeggetg ggtggeagte
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gettetetee tteaceatee tetteetgge etggettgee ggetteaget egegeetett
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cgccgtcatc cgcttcgaaa gcatcatcca cgagttcgac ccgtggttta actatagatc
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aacacatcat cttgcatctc atgggttcta tgaattttta aattggtttg atgaaagagc
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atggtatcca ctaggaagaa tagtaggtgg tactgtttac ccagggttga tgataaccgc
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caatcttatt	ccactgcatg	catttgtgtt	ggtactgatg	cagatacage	aaaagagtct	1080
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<210> 630 <211> 851

<212> DNA

<213> Homo sapiens

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60

120

180

240

300

tggetteett ggeteetete tgeateette eegacettee eageaatatg eatettgeae 360
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		aaccaagcca				960
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<213> Homo sapiens

<400> 633

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<211> 1396
<212> DNA
<213> Homo sapiens
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<222> (1)...(1396)
<223> n = a,t,c or g
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1131

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<212> DNA
<213> Homo sapiens
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<400> 640

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<213> Homo sapiens

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1024

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<210> 646
<211> 709
<212> DNA
<213> Homo sapiens
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<210> 647 <211> 1498 <212> DNA <213> Homo sapiens

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gggcccggga ggtagagaaa gtcagtgcca cagcccgacc gcgctgctct gagccctggg
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1498

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<211> 2231

<212> DNA

<213> Homo sapiens

<220>

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<213> Homo sapiens

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catecacgte agettecatg gacaaggttt acggagetge cgtttttagt ggetetggat
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                                                                      180
gcatacctgg ctaagggtag ctaccatagc ctttattatt caattgaaaa gcctttgaaa
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                                                                      300
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<210> 660 <211> 735 <212> DNA <213> Homo sapiens

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accccacgag gcgctcagca cccagggaag gcgcgtgtgt ccccgatgct ggctcctccc 180
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<211> 978

<212> DNA

<213> Homo sapiens

<400> 661

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<210> 662

<211> 1118

<212> DNA

<213> Homo sapiens

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<210> 663

<211> 556

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 682

<211> 574

<212> DNA

<213> Homo sapiens

<400> 682

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tittgaacag agitaacccc agcicatatt caaggggact aaagaatggt gcactcagtc 360 gaggtattac tgctgcattc aagcctacaa gicaacacta cacgaatcca acatcaaatc 420 cagiggctgc cicaccaata aattitcatc cigagicatag atciticagat agitcigta 480 tiggicagcc tittictaaa cctgiaagtg titictaaaac tatacggcca gcicagggat 540 ccattggatg tigittatca atatcaacag tacc 574
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<210> 683 <211> 627 <212> DNA <213> Homo sapiens

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<210> 684 <211> 1271 <212> DNA <213> Homo sapiens

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<210> 685
<211> 685
<212> DNA
<213> Homo sapiens
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<221> misc_feature
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<223> n = a,t,c or q

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685

780

<210> 686 <211> 962 <212> DNA <213> Homo sapiens

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<400> 686 egeggeegeg tegaetttaa gattaaatte atgtattgaa aatattgtte agaeeeeatg 60 tgacataact ggagccagtg cagtgccatg aagaactacg agattagcct ggatattaac 120 ttgtcttcta gagaatagat ttcatgttcc attcttctgc aatggttaat tcacacagaa 180 aaccaatgtt taacattcac agaggatttt actgcttaac agccatcttg ccccaaatat 240 gcatttgttc tcagttctca gtgccatcta gttatcactt cactgaggat cctggggctt 300 teccagtage cactaatggg gaacgattte ettggcagga getaaggete eecagtgtgg 360 tcattcctct ccattatgac ctctttgtcc accccaatct cacctctctg gactttgttg 420 catctgagaa gatcgaagtc ttggtcagca atgctaccca gcttatcatc ttgcacagca 480 aagatettga aateaegaat gecaeeette agteagagga agatteaaga tacatgaaae 540 caggaaaaga actgaaagtt ttgagttacc ctgctcatga acaaattgca ctgctggttc 600 cagagaaact tacgcctcac ctgaaatact atgtggctat ggacttccaa gccaagttag gtgatggctt tgaagggttt tataaaagca catacagaac tcttggtggt gaaacaagaa 720

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<210> 688 <211> 639 <212> DNA <213> Homo sapiens

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<210> 689 <211> 116

<212> DNA

<213> Homo sapiens

<400> 689
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<210> 690 <211> 509 <212> DNA

<213> Homo sapiens

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<210> 691 <211> 1362 <212> DNA <213> Homo sapiens

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<210> 692 <211> 503

<212> DNA

<213> Homo sapiens

<400> 692

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gttttcgggc tctctgagcc					180
gctagtccgc tacaggaagg	tggtcatcct	cggataccgc	tgtgtaggga	agacatcttt	240
ggcacatcaa tttgtggaag					300
ttacagcaag atagtgactc	ttggcaaaga	tgagtttcac	ctacatctgg	tggacacagc	360
agggcaggat gagtacagca	ttctgcccta	ttcattcatc	attggggtcc	atggttatgt	420
gcttgtgtat tctgtcacct	ctctgcatag	cttccaagtc	attgagagtc	tgtaccaaaa	480
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<210> 693

<211> 1671

<212> DNA

<213> Homo sapiens

<400> 693

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                                                                     120
ccgggctagt cctctccctc ccgagagctc tgcttttacg gtttctggat cgcttcctca
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teettgteee tgggaggeea ggageaageg ceagageaca ageaggagea aggagtggag
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                                                               1440
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                                                               1500
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                                                               1560
ccctttgtca gccccttgct tgcctcccag agcctgtcca tcggcaacca ggtagggtcc
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<210> 694

<211> 898

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(898)

<223> n = a,t,c or g
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<210> 695 <211> 630 <212> DNA <213> Homo sapiens

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                                                                      540
qaqataqqct cctgagtatt ttgaaaaaaca atagaaagag cccctcacag tccagccttc
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<210> 696

<211> 879

<212> DNA

<213> Homo sapiens

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<210> 697

<211> 719

<212> DNA

<213> Homo sapiens

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<210> 698 <211> 420 <212> DNA <213> Homo sapiens

<400> 698
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gcccccggct tttcggcgg cttcacgcct ctgcacctcc ccgcctccaa ctcccgctgg 360
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<210> 699 <211> 422 <212> DNA <213> Homo sapiens

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<210> 700 <211> 412 <212> DNA <213> Homo sapiens

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tcccaacacc acgaggaaca aaaatgagcc atccaaatga gctttaccca aattcctgac 180

ccacggtgtc	aagagcaatg	aaagggttgt	cgtttggctc	tttccgccat	cttttcgtgc	240
cgccacaatg	gtgcacatga	atgtcctgcc	tgatgctctc	aagagcatca	acaatgccga	300
aagaagaggc	aaaccccagg	ttcttattag	gctgtgctcc	aaaatcatca	tctggtttct	360
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<210> 701

<211> 977

<212> DNA

<213> Homo sapiens

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977

<210> 702 <211> 406 <212> DNA <213> Homo sapiens

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<400> 702

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ttagtcttct ggaggctatg atttttgcct tactcccaaa gccacggaag aacgttgctg 180
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catgtaagat ggctcgggaa gctggagcca caagagtgca cgcctatacc tgcgattgca 360
gccaaaaagga aggagtgtat agagtagccg accaggttaa aaaaga 406

<210> 703

<211> 987 <212> DNA <213> Homo sapiens

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<210> 704 <211> 473 <212> DNA <213> Homo sapiens

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<210> 705 <211> 435 <212> DNA <213> Homo sapiens <220> <221> misc_feature <222> (1)...(435) <223> n = a,t,c or g

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                                                                      120
aatttcagca cgtcctggca cactgggctg tgggaggtct gtgagcaaat ggaagaacat
                                                                      180
gagaggaact tgttaatgct ggaaatacaa aatcagctcc atcgcaggct tcagggtctg
                                                                      240
catctgcctt cctgtaatcc cacccatctt tntagtgtgt atgtgggttt tttgtttgtt
                                                                      300
ttgagacaaa gtcttgcttt gtcgcccagg ctggagtgca gtggcacaat ctcagctcac
                                                                      360
tgcaagctct gcctcccggg ttcaagcaat tctcctgcct cagcctcctc agtagctggc
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attataggcg cgtgc
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<210> 706
<211> 894
<212> DNA
<213> Homo sapiens
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tgcgctcagt tccagctatt cttcagatgc tctggatttt gagacggagc acaaattgga
                                                                     180
ecctgtattt gatteteeac ggatgteeeg cegtagtttg egeetggeea egacageatg
                                                                     240
caccetgggg gatggtgagg ctgtgggtgc cgacagcggc accagcagcg ctgtctccct
                                                                     300
gaagaaccga gcggccaggt gagcaccgct gcacttcctc tccatctgat ctctaacacc
                                                                     360
agttaaaacc aagcttccat actttttggt ctgtaaagcc gcaccctgtc tcgagcttaa
                                                                     420
ggatatgtgt gtgtatgtgc gtgtacagac acacaaacct gccatataaa gtggtagttt
                                                                     480
gctgcaaata aagactgaaa ggaactctgg aatctgtgtg gcttgtctag tattgatgtt
                                                                     540
etgetgttet tgttteaagt tetetteget ggtgeaegee aegtgeagtg ceageaetea
                                                                     600
ggtctggaag ctttgtggtc ctgtggtggg agctcagcta cagctgtcct accacatgtg
                                                                     660
taaagaggaa ggaatcttac agattacaca tgctgtcgtg gacgatctcc gtgtccagtt
                                                                     720
cattetttt tetggagaeg gagteteget ettgtegece agggtggaat geagtggeae
                                                                     780
gateteaget caetgeetee tetgteteee gggtteaage gattetaetg caegeageet
                                                                     840
cctgagtagc tgggattaca ggcgcccgcc accacqcctg ggcaacagag tqaq
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<211> 410
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(410)
<223> n = a,t,c or g
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<210> 707

<400> 707
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cctgttggtg	gactgtactg	atactcaact	agagtgtgaa	gggactggat	tcctgcccct	120
gagacacaat	gcaagctgta	gtgcccttga	acaagatgac	agccatctca	ccagaacctc	180
	ctcgactgaa					240
	aagaggaaat					300
	agaagtagct					360
atcagtggct	gagaccagac	attcacacga	aagaancaga	ttttagagct		410

<210> 708 <211> 650 <212> DNA

<213> Homo sapiens

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ggtggtggcg	ctgctcatcg	tttgcgacgt	tccctcagcc	tctgcccaaa	gaaagaagga	180
gatggtgtta	tctgaaaagg	ttagtcagct	gatggaatgg	actaacaaaa	gacctgtaat	240
aagaatgaat	ggagacaagt	teegtegeet	tgtgaaagcc	ccaccgagaa	attactccgt	300
tatcgtcatg	ttcactgctc	tccaactgca	tagacagtgt	gtcgtttgca	agtatgaact	360
ccaactacgc	tttaaaatta	aataactcat	ataacgttaa	ccatttctca	atcccagaag	420
ggccaagtta	gtgcagtagg	tacttaaata	atgtgtatac	cttactcagg	atgtctatgg	480
tagcaatact	actgctcttt	tatagtcaat	tcttgattat	ccgtatcagt	gggggaagca	540
tggataaata	attgtggtag	ccatcataaa	agtaacttaa	agatcaaaca	gtcatcttat	600
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<210> 709 <211> 534 <212> DNA <213> Homo sapiens

<400> 709 tttcgtggcg aacgaggccc cacctctgcc gggagcggga cgagcgcgca ggcgcagtct 60 ccccaggttg tagacgctgc ggcccggccc ggcgggtaaa taacagatgc gggtgaaaga 120 . tccaactaaa gctttacctg agaaagccaa aagaagtaaa aggcctactg tacctcatga 180 tgaagactet teagatgata ttgetgtagg tttaaettge caacatgtaa gteatgetat 240 cagcgtgaat catgtaaaga gagcaatagc tgagaatctg tggtcagttt gctcagaatg 300 tttaaaagaa agaagattct atgatgggca gctagtactt acttctgata tttggttgtg 360 cctcaagtgt ggcttccagg gatgtggtaa aaactcagaa agccaacatt cattgaagca 420 ctttaagagt tccagaacag agccccattg tattataatt aatctgagca catggattat 480 atggtggtat gaatgggatg aaaaaatttt cacccctttg aataaaaaag gttg 534

<210> 710 <211> 478 <212> DNA

<213> Homo sapiens

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		gacaggaggg				120
ggagcgtgga	gaggagagac	agggtgaagg	tggcggctgg	ctttctggaa	gcaggtggcc	180
tttggtgcgg	tcagcattcg	tgccagcccc	ctcttctctg	atcctctcca	tgtgtctctc	240
tcctggaatc	ccagaagctg	cccctgactc	cccattaact	gcctctgccc	ctacccccta	300
ggtgatgctt	ctgggagaca	caggcgtcgg	caaaacatgt	ttcctgatcc	aattcaaaga	360
cggggccttc	ctgtccggaa	ccttcatagc	caccgtcggc	atagacttca	gggtgaggtg	420
gctgcaggca	cttgcttcca	gcagagagcc	agggctgtgg	ctcaggcatg	ggggggtt	478

<210> 711 <211> 585 <212> DNA <213> Homo sapiens

<400> 711 cttctacccc cggagctcag ctgatcttcc cttccagact acgaggtgtg aatttcaaac 60 ttccgtaatg gagttagccc acagtttatt gctaaatgaa gaagctttgg ctcaaatcac 120 cgaagcaaaa agaccagttt tcatctttga atggttgcga tttcttgata aagtcttggt 180 tgctgccaac aaggtatggt attgctcttt tttcccagtt gcattaacgt gaagagatta 240 tgtggtcatg attcttaaga aaacacatgt tatgttttgg aaggtttatg ggtcacttat 300 ggaacttgag agtattacac gaatgggaaa tttagtggca aaactcaaac ctcgtttaaa 360 tocageteat tgeetatett etttatgttt gtacetggge ageteattgt aactggagaa 420 aaacatggct atatgactgg tgtcacttta aatttatcat cgtcacccgt tgcaagtgat 480 ctctctatgc tgcctaacaa tcccagtgtc ttcacttatc tctttgagga gtcaataata 540 ggctcttttt tttttaatct gttttttctt cctgcatagc cttgt 585

<210> 712 <211> 391 <212> DNA · <213> Homo sapiens

<400> 712

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<210> 713 <211> 524 <212> DNA <213> Homo sapiens

<400> 713 atccccacag ggtaatgggt gtcccgatgt cacgggggac tetgtgatcc gtgttcccct 60 gaccetecta gtgcacaact tggceggget caetgggete etgcaceact geetgteagg 120 teegetgeea geeceaagee eeceaecage catgagetee teeagaaagg accaeetegg 180 cgccagcagc tcagagcccc tcccggtcat cattgtgggt aacggcccct ctggtatctg 240 cctgtcctac ctgctctccg gctacacacc ctacacgaag ccagatgcca tccacccaca 300 cccctgctg cagaggaagc tcaccgaggc cccgggggtc tccatcctgg accaggacct 360 ggactacetg teegaaggee tegaaggeeg ateceaaage eeegtggeee tgetetttga 420 tgcccttcta cgcccagaca cagactttgg gggaaacatg aagtcggtcc tcacctggaa 480 gcaccggaag gagcacgcca tececcacgt ggttetggge egga 524

<210> 714 <211> 2468 <212> DNA <213> Homo sapiens

<400> 714 gaatcgacgc acgcgtgcgc agcgctgcca gcgtggaagg agctgcgggg cgcgggagga 60 ggaagtagag cccgggaccg ccaggccacc accggccgcc tcagccatgg acgcgtccct 120 ggagaagata gcagacccca cgttagctga aatgggaaaa aacttgaagg aggcagtgaa 180 gatgctggag gacagtcaga gaagaacaga agaggaaaat ggaaagaagc tcatatccgg 240 agatattcca ggcccactcc agggcagtgg gcaagatatg gtgagcatcc tccagttagt 300 tcagaatctc atgcatggag atgaagatga ggagccccag agccccagaa tccaaaatat 360 tggagaacaa ggtcatatgg ctttgttggg acatagtctg ggagcttata tttcaactct 420 ggacaaagag aagctgagaa aacttacaac taggatactt tcagatacca ccttatggct 480 atgcagaatt ttcagatatg aaaatgggtg tgcttatttc cacgaagagg aaagagaagg 540 acttgcaaag atatgtaggc ttgccattca ttctcgatat gaagacttcg tagtggatgg 600 cttcaatgtg ttatataaca agaagcctgt catatatctt agtgctgctg ctagacctgg 660 cetgggeeaa tacetttgta ateagetegg ettgeeette eeetgettgt geegtgtace 720 ctgtaacact gtgtttggat cccagcatca gatggatgtt gccttcctgg agaaactgat 780 taaagatgat atagagcgag gaagactgcc cctgttgctt gtcgcaaatg caggaacggc 840 agcagtagga cacacagaca agattgggag attgaaagaa ctctgtgagc agtatggcat 900 atggetteat gtggagggtg tgaatetgge aacattgget etgggttatg tetecteate 960 agtgctggct gcagccaaat gtgatagcat gacgatgact cctggcccgt ggctgggttt 1020 gccagctgtt cctgcggtga cactgtataa acacgatgac cctgccttga ctttagttgc 1080 tggtcttaca tcaaataagc ccacagacaa actccgtgcc ctgcctctgt ggttatcttt 1140 acaatacttg ggacttgatg ggtttgtgga gaggatcaag catgcctgtc aactgagtca 1200 acggttgcag gaaagtttga agaaagtgaa ttacatcaaa atcttggtgg aagatgagct 1260 cagctcccca gtggtggtgt tcagattttt ccaggaatta ccaggctcag atccggtgtt 1320 taaagccgtc ccagtgccca acatgacacc ttcaggagtc ggccgggaga ggcactcgtg 1380 tgacgcgctg aatcgctggc tgggagaaca gctgaagcag ctggtgcctg caagcggcct 1440 cacagteatg gatetggaag etgagggeae gtgtttgegg tteageeett tgatgaeege 1500 agcaggtaaa ccaggcttgg tggacatccc ttgcttttgt tctggggctg ctgggtagat 1560 tagettgeee ttatgataet eeatteteet agagttatta geagetettt ttggagggge 1620

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                                                                    1980
taccagggag cacaggggag caggcgccac cttqaggcat aaaccagag aaacaagacc
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                                                                    2100
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                                                                    2160
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                                                                    2220
gggaggtaga ggaggaaaa atcacttgag cccagagagg tcaaggctac agggagctga
                                                                    2280
gategeatea etgtaeteea getggggtga aaeggegaga etetaeetea aaaataaata
                                                                    2340
aatacataca taattaataa ataaaacatc aaagaccagc cgacctaact ccatctaaaa
                                                                    2400
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<210> 715
<211> 924
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(924)
<223> n = a,t,c or q
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<210> 716 <211> 679 <212> DNA <213> Homo sapiens

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                                                                      120
cetteegggt ggtgggagag aagcagetee egcaggagat tatttteetg gtetggtege
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ccaageggga teteattget ttggecaaca cagetggega ggttttaett categaetgg
                                                                      240
caagttttca tcgagtttgg agttttccac caaatgaaaa tacaggaaag gaggtgacgt
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gtctggcatg gagaccagat ggcaaacttt tggcctttgc tcttgctgat accaagaaaa
                                                                     360
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tttcctgtat gcattggatg gaagtgacag tagaaagcag tgttctcaca tcattttata
                                                                     480
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gcaacacctc aaaaatattt agtgaagaaa attctgatga aattattaag ctcttgggag
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acgtcagget taatattete gteettggag gaagetetgg atttattgag etttatgett
                                                                     660
atggaatgtt taaaattgc
                                                                     679
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<211> 821
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(821)
<223> n = a,t,c or g
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<210> 717

<400> 717 ctttcatact gcctcctccc ttgtttttct gtctcagaga gatagtctgt cctaaatatc 60 ccatgtagcc caggccactg aattaaaacg gagcgtattc gttctctgcc ccaccccgca 120 actectgaaa geggegeaae teaattaett gateettata tgeeceaege gggaeteata ctacgtttcc cgtgaacacg tgcagtccaa accccgcccc tgatatttat ctcagtggac 240 ggtggccgga aaaggacaat ggtttccatg tcagcggata aacgctctcc cctcggctcc 300 cggacgcgac ggaggtcgta gtagtagtga gtacgtgctg aggagcaaag gagtaaccaa 360 gagatecagt gacegaeaga geaagageea tgeegegeeg gggeetggtg getgggeeag 420 acttggagta ttttcagcgt cactatttca cgccggcgga ggtggcccaa cataacaggc 480 ccgaagacct ctgggtatct tacctgggac gcgtgtacga cctaacgtca ttggcacagg 540 aatacaaggg gaacctgctg ctgaaaccca tcgtggaagt tgcaggccag gatatcagcc 600 actggtttga tecaaagaee agagaegtga gttatgetgg aacetgggat tgtgggtaga 660 ggaaatggag agcggggatg ggaaggaaag gcggaggcta gccagagcct aatggctgct 720 ctgacaccct cgccccaaac cctcctttaa agatccgcaa gcacgaattc caccacatgg 780 nataagggtc gtcaatgnnn nnnnaagggg natcaanccc c 821

```
<210> 718
<211> 480
<212> DNA
<213> Homo sapiens
```

<400> 718
ccggattccg ggtcgacgat ttcgtgcggc ttttgtgttg ggcagcgcga atgtggcgag

```
cteggtgegt cteegetget cettecett ateetgga ggteeaagtg gteegegge 120 agettetgtt getetggae etgeaggte eggaaggtee ttaggagga eeceagaeae 180 eggagaetgg gaaatggatt eagtgteatt tgaagatgtg getgtggeet ttaeteagga 240 ggagtggget ttgetggate etteteaaaa gaatetetae agagatgtga tgeaagaaat 300 etteaggaae etggettetg taggaaaeaa ateagaagae eagaatatee aagatgaett 360 eaaaaateet gggagaaate taageagtea tgtggtagag agaetgttg aaattaaaga 420 aggeagteaa tatggagaaa eetteageea ggatteaaat ttgaatetga ataagatagt 480
```

<210> 719

<211> 467

<212> DNA

<213> Homo sapiens

<400>	719					
cgtaatctct	cagcctttct	gtgtctcctt	tcctccgcct	cagtttgggg	cgggtcgggg	60
gaatggctga	ggagatggag	tcgtcgctcg	aggcaagctt	ttcgtccagc	ggggcagtgt	120
caggggcctc	agggtttttg	cctcctgccc	gctcccgcat	cttcaagata	atcgtgatcg	180
gcgactccaa	tgtgggcaag	acatgcctga	cctaccgctt	ctgcgctggc	cgcttccccg	240
accgcaccga	ggccacgata	ggggtggatt	tccgagaacg	agcggtggag	attgatgggg	300
agcgcatcaa	gatccagcta	tgggacacag	caggacaaga	acgattcaga	aagagcatgg	360
ttcagcacta	ctacagaaat	gtacatgctg	ttgtcttcgt	gtatgatatg	accaacatgg	420
ctagttttca	tagcctacca	tcttggatag	aagaatgcaa	acaacat		467

<210> 720

<211> 490

<212> DNA

<213> Homo sapiens

<400>	720					
tggcaccgat	ccgagattcc	cggatcgacg	atttcgtcgg	agccccgagg	ggccggagct	60
cctggcggtg	ccggatcctg	acggcggcct	tcccccgggt	cgattgtgat	catggctgct	120
gagtctgatg	ttctgcattt	ccagtttgaa	cagcaaggag	atgtggtctt	gcagaaaatg	180
aatcttttga	gacagcagaa	tttattttgt	gatgtatcaa	tttacattaa	tgacactgag	240
ttccaggggc	acaaggtgat	tttggctgct	tgctccactt	ttatgagaga	tcagttttta	300
ctcacacagt	caaaacatgt	cagaatcacc	atcttacaga	gtgcagaagt	tggcagaaaa	360
ttgttactgt	cttgctatac	tggagcactt	gaagttaaaa	ggaaagagct	tttgaaatac	420
ttgactgctg	ccagttacct	tcagatggtt	cacattgcgg	aaaagcgcac	agaagctttt	480
gtcaagttct						490

<210> 721

<211> 706

<212> DNA

<213> Homo sapiens

<400> 721 agaggaggtt ggtgtggagc acaggcagca ccgagcctgc cccgtgagct gagggcctgc 60 agtetgegge tggaateagg atagaeacea aggeaggaee eecagagatg etgaageete 120 tttggaaage ageagtggee eecacatgge catgetecat geegeeeege egeeegtggg 180 acagacagge tggcaegttg caggteetgg gagegetgge tgtgetgtgg etgggeteeg 240 tggctcttat ctgcctcctg tggcaagtgc cccgtcctcc cacctggggc caggtgcagc 300 ccaaggacgt gcccaggtcc tgggagcatg gctccagccc agcttgggag cccctggaag 360 cagaggccag gcagcagagg gactcctgcc agcttgtcct tgtggaaagc atcccccagg 420 acctgccate tgcagccggc agcccctctg cccagcctct gggccaggcc tggctgcagc 480 tgctggacac tgcccaggag agcgtccacg tggcttcata ctactggtcc ctcacagggc 540 ctgacatcgg ggtcaacgac tcgtcttccc agctgggaga ggctcttctg cagaagctgc 600 ageagetget gggeaggaac attteeetgg etgtggeeac cageageeeg acaetggeea 660 706 ggacatccac cgacctgcag gttctggctg cccgaggtgc ccatgt

<210> 722

<211> 677

<212> DNA

<213> Homo sapiens

<400> 722 tttcgtaacg ccgcgtgctc ttcccaaggg gaggacgcgg gagaagccgg ggcctgagtg 60 ctccaaggcc ccgtgggctt cttgggtttg ttgcctccgg ccgctcatta actcaggatg 120 gcgtggaaga cctcgcccgc ctccccttct gggccgcggc tccgcttaag tgaaggcctg 180 tttgggcgtc cccaccetgg agaggggccg gggtctggat tttcagaact gccactcttc 240 tagtgegetg gegteaatge tecetteete gggeeattgg agaeteegtt getttttaat 300 ggeggeageg getgetgggt gageagetgg aggeeggaea gtgttegtee cateeggaga 360 ggategettt etectggegt eaccageget gggttggtgg gggtagettt tecetetttg 420 ctcctccatt cttgaagaaa gaagaagatg ccactgccat ttgggttgaa actgaaacgc 480 accoggogot acacggtgtc cagcaagagt tgcctggttg cccggatcca actgcttaat 540 aacgagtttg tggagttcac cctgtccgtg gagagcactg gccaggaaag cctcgaggcc 600 gtggcccaga ggctggagct gcgggaggtc acttacttca gcctctggta ctacaacaag 660 caaaatcagc gccggtg 677

<210> 723

<211> 600

<212> DNA

<213> Homo sapiens

<400> 723

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cttgggaatc tgcgtcagaa gtcactcgca gtcccgtcag cccagaagac gtaaagcagg 120
ctaccagcaa ttttgaaaac ttgcaaaaac agcttgcaag gaaaatgaag cttcctattt 180
tcatagcaga tgcattcaca gcaagagcat ttcgtgggaa tcctgctgct gtttgcctcc 240
tagaaaatga attggatgaa gacatgcatc agaaaattgc aagggagatg aacctctctg 300

```
aaactgettttateegaaaactgeaccegacagacaactttgeacaaagtteetgetttg360gactgagatggtttacaccagegagtgaggteecactetgtggecatgeeacetggett420ctgeagetgtgetgttteacaaaataaaaaacatgaatagcaegeteacgtt.tgteacte480tgagtgagaactaagggeeagacgageagaggaeggeategteetggaettgeetettt540atceageecaceeccaggaetteeatgaagtagaggaettgataaagaetgecataggea600
```

<210> 724 <211> 530

<212> DNA

<213> Homo sapiens

<400> 724

tttcgttgcg	cgttccggaa	ctggtttccc	ggaaggagta	tgtctgcgcc	ttcgatccga	60
ccggaagttg	cacgctgagc	cgcggacacc	atgcagtcgg	atgatgttat	ctgggataca	120
ctaggaaaca	agcaattttg	ttccttcaaa	ataagaacca	agactcagag	cttctgccga	180
aatgaatata	gcctgactgg	actgtgtaat	cggtcatcct	gtcccctggc	aaatagtcag	240
tatgccacta	ttaaagaaga	gaaaggacag	tgctacttgt	atatgaaggt	tatagaacga	300
gcggcttttc	ctcggcgtct	ctgggaacgg	gtccggctta	gtaaaaacta	tgagaaagca	360
ctggagcaaa	tagatgaaaa	tctgatttac	tggccccgtt	tcattcgaca	caaatgtaag	420
		ccaataccta			actaaagcga	480
cagaggaaac	ttgttccttt	gagtaagaag	gtggagcgta	gggagaaaag		530

<210> 725

<211> 428

<212> DNA

<213> Homo sapiens

<400> 725

```
tttcgtagag cggggactcg gcgaccctgc cctcccgacc ctcatgttcg aagagcctga
                                                                      60
gtgggccgag gcggccccag tagccgcggg ccttgggccc gtaatctcac gacctccgcc
                                                                     120
tgcggcctcc tcgcaaaaca aggtgagtga ctcgcgggag caatgggagc tgtttcaggc
                                                                     180
egegaagegg acattggtgg atcceagege tgtgtgtatt geggggaggg acacetgtgg
                                                                     240
cacegttaag ggcgagtcct gatctgaaga tccgagaact tccaaaagaa actgacqttq
                                                                     300
ggtcagagag agttgttgag taaaagttgg tgaagcgaag agggttcttc agacaggaaa
                                                                     360
aagtacgtac aagggccctg ggacaagaga gcatgttctg tcagagtcac aaacacaagt
                                                                     420
ggtccttt
                                                                     428
```

<210> 726

<211> 859

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(859) <223> n = a,t,c or g

<400> 726 gtggtggaat teetetggag caggaggeec agtggetett etgacecaag geecegeegt 60 ccagcttcta agtgccagat gatggaggag cgtgccaacc tgatgcacat gatgaaactc 120 agcatcaagg tgttgeteca gteggetetg ageetgggee geageetgga tgeggaecat 180 gcccccttgc agcagttctt tgtagtgatg gagcactgcc tcaaacatgg gctgaaaqtt 240 aagaagagtt ttattggcca aaataaatca ttctttggtc ctttggagct ggtggagaaa 300 ctttgtccag aagcatcaga tatagcgact agtgtcagaa atcttccaga attaaagaca 360 gctgtgggaa gaggccgagc gtggctttat cttgcactca tgcaaaagaa actgqcagat 420 tatctgaaag tgcttataga caataaacat ctcttaagcg agttctatga gcctgaqgct 480 ttaatgatgg aggaagaagg gatggtgatt gttggtctgc tggtgggact caatqttctc 540 gatgccaatc tetggettga aaggagaaga ettggattet caggttggag taatagattt 600 ttccctctac cttaaggatg tgcaggatct tgatggtggc aaggagcatg aaagaattac 660 tgatgtcctt gatcaaaaaa attatgtgga agaacttaac cggcacttga gctgcacagt 720 tggggatctt caaaccaaga tagatggctt ggaaaagact aactcaaagc ttcaagaang 780 agtttcagct gcaacagacc gaatttgctc acttcaagaa gaacagcagc agttaagaga 840 acaaaatgaa ttaattcga 859

<210> 727 <211> 450 <212> DNA <213> Homo sapiens

<400> 727

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ggtaatgagg ctgttacgcg ccttctccgc atcttggcgg gagcctgacg ccccgcttct 120
tccctaacgg ggtgttccac cggcgcctgc cgaggcctag gcctccgcag ccgcctccg 180
tctcctcagc cccgacgctg cgcccgcttt gtgctcattt ttctctgggg aaactgaggc 240
tccgagtgcg aaagtcagcc gaggtcgcc cgccaggac agagaagggc tgggggtcgg 300
ctgagccgcg gcattcccgg gcccgctag ggctgcaggg tctcaggatg gcagcctcgg 360
cgcaggtgtc tgtgaccttt gaggatgtgg ctgtgacatt cacccaggag gagtgggac 420

450

<210> 728 <211> 439 <212> DNA <213> Homo sapiens

agttggatgc agcccagaga accttgtatc

<400> 728

tttcgtgggt cgctttcctc accttcctcg ctgcgcgggc ggcggttggt aaccggtcag 60
accagcccga gagggacctg gtgcctgtac ccaggcttct gtcgctctgt cgcctgcgct 120
atgccctgct gtagtcacag gagctgtaga gaggaccccg gtacatctga aagccgggaa 180

atggacccag tggtctttga ggatgtggct gtgaacttca cccaggaaga gtggacattg 240 ctggatattt cccagaagaa tctctctagg gaagtgatgc tggaaacttt caggaacctg 300 acctctatag gaaaaaatg gagtgaccag aacattgaat atgagtacca aaaccccaga 360 agaagcttca ggagtctcat agaagagaaa gtcaatgaaa ttaaagaaga cagtcattgt 420 ggagaaactt ttacccagg 439

<210> 729 <211> 236 <212> DNA

<213> Homo sapiens

<400> 729

cqqccqcqtc qa	ccgacgtt agtgagggac	ccaatgtgag	teceeggeea	gctgaatcca	60
	tgcgtggt cagcactgcc				120
	gtcaccat gccacagaat		-	-	180
	gattacca tgagaaaaag				236

<210> 730

<211> 807

<212> DNA

<213> Homo sapiens

<400> 730

1.007	. • •					
tgggaacaca	agttgacgct	ttttgtgttc	cttgagtcca	gtcgggaagg	gcccttgtga	60
ctgggtctca	tgccaaacaa	cttgttacaa	taagagctag	ggtcccagac	catgcggaaa	· 120
cttcatgaga	atcctctgta	gtctggtgag	tgtagtgtcc	gactctggag	cccaggctgt	180
tgcttcccgg	tctggtggtg	aatcctccat	agtctggaga	tctcagccct	gctgagctga	240
tgatgctgac	tataggagat	gttattaaac	aactgattga	agcccacgag	caggggaaag	300
acatcgatct	aaataaggtg	aaaaccaaga	cagctgccaa	atatggcctt	tctgcccagc	360
cccgcctggt	ggatatcatt	gctgccgtcc	ctcctcagta	tcgcaaggtc	ttgatgccca	420
agttaaaggc	gaaacccatc	agaactgcta	gtgggattgc	tgtcgtggct	gtgatgtgca	480
aaccccacag	atgtccacac	atcagtttta	caggaaatat	atgtgtatac	tgccctggtg	540
gacctgattc	tgattttgag	tattccaccc	agtcttacac	tggctatgag	ccaacctcca	600
tgagagctat	ccgtgccaga	tatgaccctt	tcctacagac	aagacaccga	atagaacagt	660
taaaacaact	tggtcatagt	gtggataaag	tggagtttat	tgagatgggt	ggaacgttta	720
tggcccttcc	àgaagaatac	agagattatt	ttattcgaaa	tttacatgat	gccttatcag	780
gacatacttc	caacaatatt	tacgagg .				807

<210> 731

<211> 944

<212> DNA

<213> Homo sapiens

<400> 731 tttcgtgtga ggggaggggc gcgtgctaaa ccagaagagg taaaccaatg cagtgagaga 60 gaggtggttg tgggctccac agcttctgat ttggaggaag ctgcgagacc gagagcctag 120 gagcacette caegeccagg getgtggtae aggttggtgg gggaggggeg ccaegeggtg 180 tttggcagga aggggaggcc tctctactga ccggaagctg cgctagaaaa agaaggagga 240 gactgcggcg cagcagcgac tagtgggagt ccgatgtggg agaggggctg cggccaccgc 300 caccgccgcc gccaccagga aggcggagga cgcaggagcc aagagcaagg gacgccgcca 360 eggteatett egeetgeece geegeetet tagagacaet cattgeetat ggateateet 420 ctcccagett ttgcaagcac cggqctqctc gcccgctqat tttcctcctc cataqqctca ctqcqqaggc aacgqcqagq tgtccqattt gtgcacttga qqcccqcaat ccqqqacqqt 540 ggggaatetg cgcctcctqq ccqqqcatga agaccccgtt tqqaaaqqca qctqcaqqqc 600 ageggteeag gaegggeget ggeeaeggea gtgtgtetgt taccatgata aagaggaagg 660 ctgcacacaa gaagcatagg agccgaccca cctcccagcc tcgggggaac atcgtgggct 720 gcataattca gcacggatgg aaagatggag atgaacctct aacacagtgg aaaggaaccg 780 ttctggatca gctcctttga ataaacctgc ccaccacaa gaacccatac atgactttct 840 tttcattgta tcaaacgaat gtgtccaccg gtgtgagcac cagcaactca cttcttcctc 900 agacatetet aaagetggae agaatatgag ggacaatate gttt 944

<210> 732 <211> 761 <212> DNA <213> Homo sapiens

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<400> 732
cegagacete ggtgtggccc ttgaggcatt teaatgggeg agggceggeg actgtggate
                                                                      60
tggagctgga cgcgctggag gggaaggagt tgatgcagga cggcgcgtcc ctgagcgaca
                                                                     120
geacegagga egaggaggag ggggegagee tgggegaegg eageggggeg gaaggeggea
                                                                     180
gctgcagcag cagcaggcgg tcgggcggcg atggcgggga cgaagtggag ggcagcggtg
                                                                     240
tgggagetgg egaaggagag actgtecage actteeeget egegegeee aagtetetaa
                                                                     300
tgcagaaget ccaatgetee ttccagacet cetggeteaa ggaettteee tggetgeget
                                                                     360
attccaagga tactggtctt atgtcttgcg gctggtgcca aaagacccct gcagatgggg
                                                                     420
gaagogtgga cettececca gtggggcatg atgagettte gegagggace egcaactaca
                                                                     480
agaaaaccct cctcctgagg caccacgtct ctaccgagca caaactccac gaagccaacg
                                                                     540
cccaggagtc agaaatacca tcagaggagg ggtactgtga ctttaatagt aggccaaatg
                                                                     600
agaactetta ttgetatcaa ettetgegae aactaaatga acagagaaag aaaggtatte
                                                                     660
tttgtgatgt cagcattgtg gtaagcggaa aaatcttcaa agctcataag aacatcctgg
                                                                     720
ttgcaggcag ccgtttcttt aagactttat attgcttttc a
                                                                     761
```

```
<210> 733
<211> 523
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(523)
<223> n = a,t,c or g
```

<400>	733					
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			gcagccgcgg			120
cgtagtctgc	aatacgagta	caaggcgaac	tcgaatcttg	tgctccaagc	tgaccgttct	180
ctcattgacc	ggacccgccg	ggatgaaccc	acaggagagg	tgctgtccct	tgttgggaag	240
ctggagggca	cccgtatggg	agacaaggct	caacggacca	aaccgcagat	gcaggaggaa	300
agaagagcca	agcgaagaaa	gcgtgatgag	gaccggcatg	acatcaacaa	gatgaagggt	360
tatactctgc	tgtcggaggg	cattgatgag	atggtgggca	tcatctacaa	gcccaaaact	420
aaagagactc	gggagaccta	tgaggtgcta	ctcagcttca	tccaggctgc	tcttggggac	480
cagccacgtg	atatcctttg	tggggcagct	gatgaagttc	tag		523

<210> 734 <211> 1341 <212> DNA <213> Homo sapiens

<400> 7.34 ttttttttt ttaaccagat tatttcactt attatttatt ttatcttcca atttcctctt 60 gccagactcc catccaaaga gtcataagca gccttcttcc caccttctta catgaaatac 120 atccccacct gaacaaaggc acacggacag gaggaagggg aataggactt cgcaaaactg 180 gacacggcat cgcttcagat cttggactct gaggttccgt tgttactggt ttcacagtta 240 caggettegg atggtetgea egtgetgttt caagactaat ggtagtetet attgettetg 300 ttatgtcctt atccaacctg ttcagcctgt cctctgactc aaatatggag taatcaatgg 360 tgaaatctgc actaaagtca tcataactgg gggtgactgt ataataatag accacctgat 420 aatattcatc ctctcccagt ctttcttcat cctcatattc ttgtcccagg ataagtggca 480 cagcaaagat ggctacaaag aggacatcca ttctggattc tgcactattg catcaccacc 540 cagagitiges titletetetg aggetteate agtetetitt egicaeagig gaaatgitet 600 gaggaagggg tgagcatttt tctagactga aaagaatccc tttcttctqt ctqtctqqaq 660 cagecatggg ggetgeggtg tttttegget geaetttegt egegttegge eeggeetteg 720 egettttett gateactgtg getggggaee egettegegt tateateetg gtegeagggt 780 gagtagaggg cccgggagac gcgggagagc gtcgaagaga gaggtgcgga aggggctgga 840 ggaactgggg caagcctggg agcctgaatt ggggacgata agtcggaggt gaagtttggg 900 cggaggtgag gggttgggtc tgggagattt gtcctttccc gcagttggtt tccaccttcc 960 aaggatetea cagatteete etatatteet eecagegaeg teagagaagg eecaaggeeg 1020 agactegtga gggggetgtg etgacetagg caggeegagt caggtgeett aggggaggat 1080 ccaggaacgg atacctcgcc cttccgtgct cgcacactct ggctgtcatc gctctgaaga 1140 ctctttaatt agatttctcc cctttccagt gcgttcactt ttctacagat gagtctcctg 1200 gtggagacag ttaccctacc tggtccatgt ctccctaacc atccggaaqq ctaacttcca 1260 cttttcaage agetttgget ggtttccctc cttgatttct ctggctccca ctactattgc 1320 ttgtctcact gcccctgtat t 1341

<210> 735

<211> 703

<212> DNA

<213> Homo sapiens

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<210> 736 <211> 401 <212> DNA

<213> Homo sapiens

<400> 736

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<210> 737 <211> 933 <212> DNA <213> Homo sapiens

<400> 737

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ttactcttag cataaaatgg gccttaactg cagaaatgtc aaatcagaac agtagctgcc 840 ttagtaatgc ccagtgatgg gggacccctt gtgcccttgg aaaacctcac tccaagtaga 900 ggctgtatct ggagtgagtg tctacagaga ggg 933

<210> 738 <211> 420 <212> DNA

<213> Homo sapiens

<400> 738

ctggggtcgg cggagacagc tggtgtctga agecgctcgc gcccagggtg accctgtttg 60
cagcacgatg tctgaagaag aggcggtca gatccccaga tccagtgtgt gggagcagga 120
ccagcagaac gtggtgcagc gtgtggtgc tctgcccctg gtcagggcca cgtgcaccgc 180
ggtctgcgat gtttacagtg cagccaagga caggcacccg ctgctgggct ccgcctgccg 240
cctggctgag aactgcgtgt gcggcctgac cacccgtgcc ctggaccacg cccagccgct 300
gctcgagcac ctgcagccc agctggcac tatgaacagc ctcgcctgca ggggcctgga 360
caagctggaa gagaagcttc cctttctcca gcaaccttcg gagaccgtgg tgacctcagc 420

<210> 739 <211> 1248 <212> DNA <213> Homo sapiens

<400> 739 tttcgtagcg agtaaagaag cagatttgct ctccctcccg cttcctccct cccatcttcc 60 cacceggget gtgcccagge cacagageag ctgcaggeet tgggagagga cccacacage 120 ctcctgtagg tggcaacagt gccacctgtt tgactcatag ggctgaaccg aggactgaaa 180 aagggaggag gcagaccact cggagaggag ctgggaagca gtgcagagag gagagcggag 240 cggagetgec getgageaaa ggeetteace atggeegagt ceeeeggetg etgeteegte 300 tgggcccgct gcctccactg cctgtatagc tgccactgga ggaaatgccc cagagagagg 360 atgcaaacca gcaagtgcga ctgtatctgg tttggcctgc tcttcctcac cttcctcctt 420 tecetgaget ggetgtacat egggetegte etteteaatg acetgeacaa etteaatgaa 480 tteetettee geegetgggg acaetggatg gaetggteee tggcatteet getggteate 540 tetetactgg geacatatge atcettgeta ttggteetgg ecetgeteet geggetttgt 600 agacagecce tgcatetgca cagectecae aaggtgetge tgeteeteat tatgetgett 660 gtggcggctg gccttgtggg actggacatc caatggcagc aggagaggca tagcttgcgt 720 gtgtcactgc agactgcagg tagctctgaa ctccagcagt caggccctaa gaggaaagcg 780 gggaggggca ctggagaaga gcccacctca ccagctcttg tccacaggcc acagccccat 840 teetteatat tggageagee getggaattg ceetcetgge etggeetgtg getgatacet 900 tctaccgtat ccaccgaaga gagcccaaga ttctgctact gctcctattt tttggagttg 960 tectggteat etacttggee eccetatgea tetecteace etgeateatg gaacceagag 1020 acttaccacc caageetggg etggtgggac accgagggge ecceatgetg geteecgaga 1080 acaccetgat gteettgegg aagacagetg aatgeggage tactgtgttt gagactgatg 1140 tgatggtcag ctccgatggg gtccccttcc tcatgcatga tgagcacctc agcaggacca 1200 cgaatgtagc ctctgtattc ccaacccgaa tcacagccca cagcagtg 1248

<210> 740 <211> 185 <212>Amino acid <213> Homo sapiens

<400> 740 Phe Val Gly Arg Leu Leu Arg Leu Gly Glu Ala Leu Arg Leu Arg Pro 10 Asp Pro Ser Gly Gly Cys Arg Leu Gln Pro Ala Leu Val Gly Glu Thr 25 Glu Met Ser Glu Lys Glu Asn Asn Phe Pro Pro Leu Pro Lys Phe Ile Pro Val Lys Pro Cys Phe Tyr Gln Asn Phe Ser Asp Glu Ile Pro Val 55 Glu His Gln Val Leu Val Lys Arg Ile Tyr Arg Leu Trp Met Phe Tyr 70 Cys Ala Thr Leu Gly Val Asn Leu Ile Ala Cys Leu Ala Trp Trp Ile 90 Gly Gly Gly Ser Gly Thr Asn Phe Gly Leu Ala Phe Val Trp Leu Leu 105 Leu Phe Thr Pro Cys Gly Tyr Val Cys Trp Phe Arg Pro Val Tyr Lys 120 125 Ala Phe Arg Ala Asp Ser Ser Phe Asn Phe Met Ala Phe Phe Ile 135 Phe Arg Ser Pro Val Cys Pro Asp Arg His Pro Gly Asp Trp Leu Leu 155 150 Arg Leu Gly Arg Val Arg Leu Ala Val Gly Asn Trp Ile Leu Pro Val 170 165 Gln Pro Gly Arg Cys Arg Gly His Ala

<210> 741 <211> 177 <212>Amino acid <213> Homo sapiens

<400> 741 Phe Leu Gly Ala Gly Ala Asp Ile Phe Cys Ala Tyr Leu Arg Met Ser 10 Ser Lys Gln Ala Thr Ser Pro Phe Ala Cys Ala Ala Asp Gly Glu Asp Ala Met Thr Gln Asp Leu Thr Ser Arg Glu Lys Glu Glu Gly Ser Asp 40 Gln His Val Ala Ser His Leu Pro Leu His Pro Ile Met His Asn Lys 55 Pro His Ser Glu Glu Leu Pro Thr Leu Val Ser Thr Ile Gln Gln Asp 70 75 Ala Asp Trp Asp Ser Val Leu Ser Ser Gln Gln Arg Met Glu Ser Glu 85 90 Asn Asn Lys Leu Cys Ser Leu Tyr Ser Phe Arg Asn Thr Ser Thr Ser 105 Pro His Lys Pro Asp Glu Gly Ser Arg Asp Arg Glu Ile Met Thr Ser 120

<210> 742 <211> 434 <212>Amino acid <213> Homo sapiens

<400> 742

Glu Gly Tyr Leu Thr Gly Arg Pro Thr Arg Pro Val Ala Val Arg Gly Lys Ser Thr Ala Asp Leu Arg Met Met Gly Arg Ser Pro Gly Phe Ala Met Gln His Ile Val Gly Val Pro His Val Leu Val Arg Arg Gly Leu 40 Leu Gly Arg Asp Leu Phe Met Thr Arg Thr Leu Cys Ser Pro Gly Pro 55 60 Ser Gln Pro Gly Glu Lys Arg Pro Glu Glu Val Ala Leu Gly Leu His 75 70 His Arg Leu Pro Ala Leu Gly Arg Ala Leu Gly His Ser Ile Gln Gln 85 90 Arg Ala Thr Ser Thr Ala Lys Thr Trp Trp Asp Arg Tyr Glu Glu Phe 105 Val Gly Leu Asn Glu Val Arg Glu Ala Gln Gly Lys Val Thr Glu Ala 120 125 Glu Lys Val Phe Met Val Ala Arg Gly Leu Val Arg Glu Ala Arg Glu 135 140 Asp Leu Glu Val His Gln Ala Lys Leu Lys Glu Val Arg Asp Arg Leu 150 155 Asp Arg Val Ser Arg Glu Asp Ser Gln Tyr Leu Glu Leu Ala Thr Leu 170 Glu His Arg Met Leu Gln Glu Glu Lys Arg Leu Arg Thr Ala Tyr Leu 185 Arg Ala Glu Asp Ser Glu Arg Glu Lys Phe Ser Leu Phe Ser Ala Ala 200 Val Arg Glu Ser His Glu Lys Glu Arg Thr Arg Ala Glu Arg Thr Lys 215 220 Asn Trp Ser Leu Ile Gly Ser Val Leu Gly Ala Leu Ile Gly Val Ala 230 235 Gly Ser Thr Tyr Val Asn Arg Val Arg Leu Gln Glu Leu Lys Ala Leu 245 250 Leu Leu Glu Ala Gln Lys Gly Pro Val Ser Leu Gln Glu Ala Ile Arg 265 Glu Gln Ala Ser Ser Tyr Ser Arg Gln Gln Arg Asp Leu His Asn Leu 280 Met Val Asp Leu Arg Gly Leu Val His Ala Ala Gly Pro Gly Gln Asp 295 300 Ser Gly Ser Gln Ala Gly Ser Pro Pro Thr Arg Asp Arg Asp Val Asp 310 315 Val Leu Ser Ala Ala Leu Lys Glu Gln Leu Ser His Ser Arg Gln Val 330 His Ser Cys Leu Glu Gly Leu Arg Glu Gln Leu Asp Gly Leu Glu Lys 345

<210> 743 <211> 211 <212>Amino acid <213> Homo sapiens

<400> 743 Asn Leu Pro Pro Leu Thr Pro Gln Pro Gly Pro Arg Leu Ala Gly Ser 10 Gly Pro Ser His Trp Phe Ser Pro Leu Ser Leu Pro Val Ala Ser Lys 25 Ala Pro Gly Thr Met Ala Gln Ala Leu Gly Glu Asp Leu Val Gln Pro 40 Pro Glu Leu Gln Asp Asp Ser Ser Ser Leu Gly Ser Asp Ser Glu Leu Ser Gly Pro Gly Pro Tyr Arg Gln Ala Asp Arg Tyr Gly Phe Ile Gly 70 Gly Ser Ser Ala Glu Pro Gly Pro Gly His Pro Pro Ala Asp Leu Ile 85 90 Arg Gln Arg Glu Met Lys Trp Val Glu Met Thr Ser His Trp Glu Lys 105 Thr Met Ser Arg Arg Tyr Lys Lys Val Lys Met Gln Cys Arg Lys Gly 120 125 Ile Pro Ser Ala Leu Arg Ala Arg Cys Trp Pro Leu Leu Cys Gly Ala 135 140 His Val Cys Gln Lys Asn Ser Pro Gly Thr Tyr Gln Glu Leu Ala Glu 150 155 Ala Pro Gly Asp Pro Gln Trp Met Glu Thr Ile Gly Arg Asp Leu His 165 170 175 Arg Gln Phe Pro Leu His Glu Met Phe Val Ser Pro Gln Gly His Gly 180 185 Gln Gln Gly Leu Leu Gln Val Leu Lys Ala Tyr Thr Leu Tyr Arg Pro 195 200 Glu Gln Gly 210 211

<210> 744 <211> 55 <212>Amino acid <213> Homo sapiens

<400> 744

<210> 745 <211> 182 <212>Amino acid <213> Homo sapiens

<400> 745 Trp Ala Cys Phe Arg Ser Ala His Cys Ser Arg His Leu Arg Asn Arg 10 Ile Phe Met Tyr Leu Tyr Trp Asp Lys Thr Arg Ser Pro Val Cys Lys Gly Pro Ala Leu Arg Glu Glu Arg Pro Gln Pro Arg Leu Lys Leu Glu Asp Tyr Lys Asp Arg Leu Lys Ser Gly Glu His Leu Asn Pro Asp Gln Leu Glu Ala Val Glu Lys Tyr Glu Glu Val Leu His Asn Leu Glu Phe 70 75 Ala Lys Glu Leu Gln Lys Thr Phe Ser Gly Leu Ser Leu Asp Leu Leu 90 Lys Ala Gln Lys Lys Ala Gln Arg Arg Glu His Met Leu Lys Leu Glu 105 Ala Glu Lys Lys Leu Arg Thr Ile Leu Gln Val Gln Tyr Val Leu 120 125 Gln Asn Leu Thr Gln Glu His Val Gln Lys Asp Phe Lys Gly Gly Leu 135 140 Asn Gly Ala Val Tyr Leu Pro Ser Lys Glu Leu Asp Tyr Leu Ile Lys 150 155 Phe Ser Lys Leu Thr Cys Pro Glu Arg Asn Glu Ser Leu Arg Gln Thr 165 170 Leu Glu Gly Ser Thr Val 180 182

<210> 746 <211> 136 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(136) <223> X = any amino acid or stop code

<400> 746
Xaa Ala Gly Val Gln Met Lys Leu Glu Phe Leu Gln Arg Lys Phe Trp
1 5 10 15
Ala Ala Thr Arg Gln Cys Ser Thr Val Asp Gly Pro Cys Thr Gln Ser

20 . 25 Cys Glu Asp Ser Asp Leu Asp Cys Phe Val Ile Asp Asn Asn Gly Phe 40 Ile Leu Ile Ser Lys Arg Ser Arg Glu Thr Gly Arg Phe Leu Gly Glu 55 Val Asp Gly Ala Val Leu Thr Gln Leu Leu Ser Met Gly Val Phe Ser 70 75 Gln Val Thr Met Tyr Asp Tyr Gln Ala Met Cys Lys Pro Ser Ser His 85 90 His His Ser Ala Ala Gln Pro Leu Val Ser Pro Ile Ser Ala Phe Leu 100 105 Thr Ala Thr Arg Trp Leu Leu Gln Glu Leu Val Leu Phe Leu Leu Glu 120 Trp Ser Val Trp Gly Ser Xaa *

<210> 747 <211> 156 <212>Amino acid <213> Homo sapiens

<400> 747 Cys Arg Gly Arg Leu Ala Gln Leu Glu Glu Ala Ala Val Ala Ala Thr 10 Met Ser Ala Gly Asp Ala Val Cys Thr Gly Trp Leu Val Lys Ser Pro 25 Pro Glu Arg Lys Leu Gln Arg Tyr Ala Trp Arg Lys Arg Trp Phe Val 40 Leu Arg Arg Gly Arg Met Ser Gly Asn Pro Asp Val Leu Glu Tyr Tyr 60 Arg Asn Lys His Ser Ser Lys Pro Ile Arg Val Ile Asp Leu Ser Glu 75 Cys Ala Val Trp Lys His Val Gly Pro Ser Phe Val Arg Lys Glu Phe 85 Gln Asn Asn Phe Val Phe Ile Val Lys Thr Thr Ser Arg Thr Phe Tyr 100 105 110 Leu Val Ala Lys Thr Glu Gln Glu Met Gln Val Trp Val His Ser Ile 120 Ser Gln Val Cys Asn Leu Gly His Leu Glu Asp Gly Ala Ala Asp Ser 135 Met Glu Ser Leu Ser Tyr Thr Arg Ser Tyr Leu Gln 150 155 156

<210> 748 <211> 55 <212>Amino acid <213> Homo sapiens

45

35 40
Ser Thr Phe Ser Thr Leu Gln
50 55

<210> 749 <211> 381 <212>Amino acid <213> Homo sapiens

<400> 749

Lys Asp Ser Val Leu Asn Ile Ala Arg Gly Lys Lys Tyr Gly Glu Lys 10 Thr Lys Arg Val Ser Ser Arg Lys Lys Pro Ala Leu Lys Cys Thr Ser Gln Lys Gln Pro Ala Leu Lys Ala Ile Cys Asp Lys Glu Asp Ser Val 40 Pro Asn Thr Ala Thr Glu Lys Lys Asp Glu Gln Ile Ser Gly Thr Val Ser Ser Gln Lys Gln Pro Ala Leu Lys Ala Thr Ser Asp Lys Lys Asp 75 Ser Val Ser Asn Ile Pro Thr Glu Ile Lys Asp Gly Gln Gln Ser Gly Thr Val Ser Ser Gln Lys Gln Pro Ala Trp Lys Ala Thr Ser Val Lys 105 Lys Asp Ser Val Ser Asn Ile Ala Thr Glu Ile Lys Asp Gly Gln Ile 115 120 Arg Gly Thr Val Ser Ser Gln Arg Gln Pro Ala Leu Lys Ala Thr Gly 130 135 140 Asp Glu Lys Asp Ser Val Ser Asn Ile Ala Arg Glu Ile Lys Asp Gly 145 150 155 160 Glu Lys Ser Gly Thr Val Ser Pro Gln Lys Gln Ser Ala Gln Lys Val 165 170 175 Ile Phe Lys Lys Lys Val Ser Leu Leu Asn Ile Ala Thr Arg Ile Thr 185 190 Gly Gly Trp Lys Ser Gly Thr Glu Tyr Pro Glu Asn Leu Pro Thr Leu Lys Ala Thr Ile Glu Asn Lys Asn Ser Val Leu Asn Thr Ala Thr Lys 215 Met Lys Asp Val Gln Thr Ser Thr Pro Glu Gln Asp Leu Glu Met Ala 235 Ser Glu Gly Glu Gln Lys Arg Leu Glu Glu Tyr Glu Asn Asn Gln Pro 250 Gln Val Lys Asn Gln Ile His Ser Arg Asp Asp Leu Asp Asp Ile Ile 265 Gln Ser Ser Gln Thr Val Ser Glu Asp Gly Asp Ser Leu Cys Cys Asn 280 Cys Lys Asn Val Ile Leu Leu Ile Asp Gln His Glu Met Lys Cys Lys 295 Asp Cys Val His Leu Leu Lys Ile Lys Lys Thr Phe Cys Leu Cys Lys 310 Arg Leu Thr Glu Leu Lys Asp Asn His Cys Glu Gln Leu Arg Val Lys 330 Ile Arg Lys Leu Lys Asn Lys Ala Ser Val Leu Gln Lys Arg Leu Ser 345 Glu Lys Glu Glu Ile Lys Ser Gln Leu Lys His Glu Thr Leu Glu Leu 360 Glu Lys Glu Leu Cys Ser Leu Arg Phe Ala Ile Gln Gln 375

<210> 750 <211> 296 <212>Amino acid <213> Homo sapiens

<400> 750 Ser Pro Leu Arg Tyr Arg Ala Gly Gln Ser Gly Ser Thr Ile Ser Ser 10 Ser Ser Cys Ala Met Trp Arg Cys Gly Gly Arg Gln Gly Leu Cys Val Leu Arg Arg Leu Ser Gly Gly His Ala His His Arg Ala Trp Arg Trp Asn Ser Asn Arg Ala Cys Glu Arg Ala Leu Gln Tyr Lys Leu Gly Asp Lys Ile His Gly Phe Thr Val Asn Gln Val Thr Ser Val Pro Glu Leu 70 Phe Leu Thr Ala Val Lys Leu Thr His Asp Asp Thr Gly Ala Arg Tyr 85 Leu His Leu Ala Arg Glu Asp Thr Asn Asn Leu Phe Ser Val Gln Phe 100 105 110 Arg Thr Thr Pro Met Asp Ser Thr Gly Val Pro His Ile Leu Glu His 120 Thr Val Leu Cys Gly Ser Gln Lys Tyr Pro Cys Arg Asp Pro Phe Phe 135 140 Lys Met Leu Asn Arg Ser Leu Ser Thr Phe Met Asn Ala Phe Thr Ala 150 155 160 Ser Asp Tyr Thr Leu Tyr Pro Phe Ser Thr Gln Asn Pro Lys Asp Phe 170 Gln Asn Leu Leu Ser Val Tyr Leu Asp Ala Thr Phe Phe Pro Cys Leu 180 185 190 Arg Glu Leu Asp Phe Trp Gln Glu Gly Trp Arg Leu Glu His Glu Asn 195 200 Pro Ser Asp Pro Gln Thr Pro Leu Val Phe Lys Gly Val Val Phe Asn 215 220 Glu Met Lys Gly Ala Phe Thr Asp Asn Glu Arg Ile Phe Ser Gln His 230 235 Leu Gln Asn Arg Leu Leu Pro Asp His Thr Tyr Ser Val Val Ser Gly 245 250 255 Gly Asp Pro Leu Cys Ile Pro Glu Leu Thr Trp Glu Gln Leu Lys Gln 265 Phe His Ala Thr His Tyr His Pro Ser Asn Ala Arg Phe Phe Thr Tyr 280 Gly Asn Phe Pro Leu Asp Gln His 295 296

<210> 751 <211> 163 <212>Amino acid <213> Homo sapiens

20 25 30 Pro Gly Thr Glu Ala Thr Arg Pro Thr Ala Met Ser Lys Ser Leu Lys 40 Lys Lys Ser His Trp Thr Ser Lys Val His Glu Ser Val Ile Gly Arg Asn Pro Glu Gly Gln Leu Gly Phe Glu Leu Lys Gly Gly Ala Glu Asn Gly Gln Phe Pro Tyr Leu Gly Glu Val Lys Pro Gly Lys Val Ala Tyr 85 90 Glu Ser Gly Ser Lys Leu Val Ser Glu Glu Leu Leu Glu Val Asn .100 105 110 Glu Thr Pro Val Ala Gly Leu Thr Ile Arg Asp Val Leu Ala Val Ile 115 120 Lys His Cys Lys Asp Pro Leu Arg Leu Lys Cys Val Lys Gln Gly Glu 135 Ser Ser Gly Leu Leu Ser Val Leu Pro Gly Gly Gly Thr Ala Arg Gly 150 155 Ala Gly Gln 163

<210> 752 <211> 99 <212>Amino acid <213> Homo sapiens

<400> 752 Ser His Arg Pro Gln Pro Asp Ala Trp Arg Gln Gly Asn Ala Phe Gln 5 Cys Val Gln Lys Glu Lys Met Gln Val Ser Ser Ala Glu Val Arg Ile 20 25 Gly Pro Met Arg Leu Thr Gln Asp Pro Ile Gln Val Leu Leu Ile Phe 35 40 Ala Lys Glu Asp Ser Gln Ser Asp Gly Phe Trp Trp Ala Cys Asp Arg 55 60 Ala Gly Tyr Arg Cys Asn Ile Ala Arg Thr Pro Glu Ser Ala Leu Glu 70 75 Cys Phe Leu Asp Lys His His Glu Ile Ile Val Ile Asp His Arg Gln Thr Gln Asn 99

<210> 753 <211> 193 <212>Amino acid <213> Homo sapiens

50 55 60 Glu Ser Cys Gly Gly Thr Phe Gly Ile Tyr Gly Thr Cys Asp Arg Gly 70 75 Leu Arg Cys Val Ile Arg Pro Pro Leu Asn Gly Asp Ser Leu Thr Glu 85 90 Tyr Glu Ala Gly Val Cys Glu Asp Glu Asn Trp Thr Asp Asp Gln Leu 100 105 110 Leu Gly Phe Lys Pro Cys Asn Glu Asn Leu Ile Ala Gly Cys Asn Ile 120 125 Ile Asn Gly Lys Cys Glu Cys Asn Thr Ile Arg Thr Cys Ser Asn Pro 135 140 Phe Glu Phe Pro Ser Gln Asp Met Cys Leu Ser Ala Leu Lys Arg Ile 150 155 Glu Glu Glu Lys Pro Asp Cys Ser Lys Ala Arg Cys Glu Val Gln Phe 170 Ser Pro Arg Cys Pro Glu Asp Ser Val Leu Ile Glu Gly Tyr Ala Pro 180 185 Pro 193

<210> 754 <211> 73 <212>Amino acid <213> Homo sapiens

<210> 755 <211> 83 <212>Amino acid <213> Homo sapiens

83

<210> 756
<211> 100
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (100)
<223> X = any amino acid or stop code

<210> 757 <211> 130 <212>Amino acid <213> Homo sapiens

130

<400> 757 Asn Ser Arg Val Asp Asp Phe Val Ser Ala Arg Pro Lys Pro Arg Pro 10 · Leu Pro Arg Ala Arg Gly Met Val Val Val Thr Gly Arg Glu Pro Asp 25 Ser Arg Arg Gln Asp Gly Ala Met Ser Ser Ser Asp Ala Glu Asp Asp 40 Phe Leu Glu Pro Ala Thr Pro Thr Ala Thr Gln Ala Gly His Ala Leu 55 Pro Pro Ala Ala Thr Gly Ser Phe Leu Arg Leu Phe Pro Leu Thr Ser 70 Glu Gly Leu Thr Ser Leu His Ala Cys Pro His Cys Gly Ala Thr Lys 85 90 Thr Pro Cys Trp Gln Pro Cys Ser Val Gly Gly Thr Thr Ser Pro Arg 105 Thr Pro Arg Ala Gly Thr Ser Ser Thr Glu Met Ala His Thr Leu Glu 120 Met Cys

<210> 758 <211> 121 <212>Amino acid <213> Homo sapiens

<400> 758 Arg Ala Leu Trp Val Gly Gly Cys Ser Gly Glu Ala Cys Gly Ile Gly 10 Met Ser Gly Leu Leu Thr Asp Pro Glu Gln Arg Ala Gln Glu Pro Arg 20 Tyr Pro Gly Phe Val Leu Gly Leu Asp Val Gly Ser Ser Val Ile Arg Cys His Val Tyr Asp Arg Ala Ala Arg Val Cys Gly Ser Ser Val Gln 55 Lys Val Glu Asn Leu Tyr Pro Gln Ile Gly Trp Val Glu Ile Asp Pro 70 75 Asp Val Leu Trp Ile Gln Phe Val Ala Val Ile Lys Glu Ala Val Lys 85 90 Ala Ala Gly Ile Gln Met Asn Gln Ile Val Gly Leu Gly Ile Ser Thr 105 Gln Arg Ala Thr Phe Ile Thr Trp Asn 120 121

<210> 759 <211> 210 <212>Amino acid <213> Homo sapiens

<400> 759 Gly Leu Ala Ala Glu Gln Ser Met Gln Phe Val Lys Leu Trp Cys Gly 10 Cys Ser Gly Glu Phe Pro Thr Arg Leu Arg Arg Arg Thr Pro Leu Thr 25 Glu Ala Met Glu Gly Gly Pro Ala Val Cys Cys Gln Asp Pro Arg Ala 40 Glu Leu Val Glu Arg Val Ala Ala Ile Asp Val Thr His Leu Glu Glu 55 Ala Asp Gly Gly Pro Glu Pro Thr Arg Asn Gly Val Asp Pro Pro Pro 70 75 Arg Ala Arg Ala Ala Ser Val Ile Pro Gly Ser Thr Ser Arg Leu Leu 85 90 Pro Ala Arg Pro Ser Leu Ser Ala Arg Lys Leu Ser Leu Gln Glu Arg . 110 105 Pro Ala Gly Ser Tyr Leu Glu Ala Gln Ala Gly Pro Tyr Ala Thr Gly 120 125 Pro Ala Ser His Ile Ser Pro Arg Ala Trp Arg Arg Pro Thr Ile Glu 135 140 Ser His His Val Ala Ile Ser Asp Ala Glu Asp Cys Val Gln Leu Asn 150 155 Gln Tyr Lys Leu Gln Ser Glu Ile Gly Lys Gly Ala Tyr Gly Val Val 165 170 Arg Leu Ala Tyr Asn Glu Ser Glu Asp Arg His Tyr Ala Met Lys Val 180 185 Leu Ser Lys Lys Leu Leu Lys Gln Tyr Gly Phe Pro Arg Arg Pro 195 200

Pro Pro 210

> <210> 760 <211> 172 <212>Amino acid <213> Homo sapiens

<400> 760 Phe Val Tyr Gly Lys Pro Val Thr Leu Trp Pro Thr Ile Ser Ser Val Val Pro Ser Thr Phe Leu Gly Leu Gly Asn Tyr Glu Val Glu Val Glu 25 Ala Glu Pro Asp Val Arg Gly Pro Glu Ile Val Thr Met Gly Glu Asn 40 Asp Pro Pro Ala Val Glu Ala Pro Phe Ser Phe Arg Ser Leu Phe Gly 55 Leu Asp Asp Leu Lys Ile Ser Pro Val Ala Pro Asp Ala Asp Ala Val 70 Ala Ala Gln Ile Leu Ser Leu Leu Pro Leu Lys Phe Phe Pro Ile Ile 90 Val Ile Gly Ile Ile Ala Leu Ile Leu Ala Leu Ala Ile Gly Leu Gly 105 Ile His Phe Asp Cys Ser Gly Lys Tyr Arg Cys Arg Ser Ser Phe Lys 120 Cys Ile Glu Leu Ile Ala Arg Cys Asp Gly Val Ser Asp Cys Lys Asp 135 140 Gly Glu Asp Glu Tyr Arg Cys Val Arg Val Gly Gly Gln Asn Ala Ala 150 155 Leu Gln Val Phe Thr Ala Ala Ser Arg Lys Thr Met 170 172

<210> 761 <211> 104 <212>Amino acid <213> Homo sapiens

<400> 761 Ser Leu Ala Met Pro Phe Gly Cys Val Thr Leu Gly Asp Lys Lys Asn 5 Tyr Asn Gln Pro Ser Glu Val Thr Asp Arg Tyr Asp Leu Gly Gln Val 25 Ile Lys Thr Glu Glu Phe Cys Glu Ile Phe Arg Ala Lys Asp Lys Thr Thr Gly Lys Leu His Thr Cys Lys Lys Phe Gln Lys Arg Asp Gly Arg 55 Lys Val Arg Lys Ala Ala Lys Asn Glu Ile Gly Ile Leu Lys Met Val 70 Lys His Pro Asn Ile Leu Gln Leu Val Asp Val Phe Val Thr Arg Lys 85 90 Glu Tyr Phe Ile Phe Leu Glu Leu 100 104

<210> 762 <211> 249 <212>Amino acid. <213> Homo sapiens

<400> 762 Gln Arg Arg Arg Phe Arg Ala Gly Leu Trp Gly Gly His Gly Leu Thr 10 Asp Gly Leu Arg Arg Asn Gly Gly Cys Gly Cys Ser Ala Arg Val Pro 20 25 Arg Val Gly Glu Arg Leu Arg Gly His Arg Cys Pro Asp Pro Leu Cys 40 Leu Leu Leu Asp Met Leu Phe Leu Ser Phe His Ala Gly Ser Trp Glu 55 Ser Trp Cys Cys Cys Leu Ile Pro Ala Asp Arg Pro Trp Asp Arg 70 75 Gly Gln His Trp Gln Leu Glu Met Ala Asp Thr Arg Ser Val His Glu 90 Thr Arg Phe Glu Ala Ala Val Lys Val Ile Gln Ser Leu Pro Lys Asn 105 Gly Ser Phe Gln Pro Thr Asn Glu Met Met Leu Lys Phe Tyr Ser Phe 120 125 Tyr Lys Gln Ala Thr Glu Gly Pro Cys Lys Leu Ser Arg Pro Gly Phe 135 140 Trp Asp Pro Ile Gly Arg Tyr Lys Trp Asp Ala Trp Ser Ser Leu Gly 150 155 Asp Met Thr Lys Glu Glu Ala Met Ile Ala Tyr Val Glu Glu Met Lys 165 170 Lys Ile Ile Glu Thr Met Pro Met Thr Glu Lys Val Glu Glu Leu Leu 180 185 Arg Val Ile Gly Pro Phe Tyr Glu Ile Val Glu Asp Lys Lys Ser Gly 200 Arg Ser Ser Asp Ile Thr Ser Asp Leu Gly Asn Val Leu Thr Ser Thr 215 220 Pro Asn Ala Lys Thr Val Asn Gly Lys Ala Glu Ser Ser Asp Ser Gly 230 235 Ala Glu Ser Glu Glu Glu Glu Ala Cys 245

<210> 763 <211> 184 <212>Amino acid <213> Homo sapiens

Arg Leu Arg Glu Ala Gln Arg Ala Ala Thr His Ile Pro Ala Ala Gly Asp Ser Lys Ser Ile Ile Thr Cys Arg Val Ser Leu Leu Asp Gly Thr 100 105 Asp Val Ser Val Asp Leu Pro Lys Lys Ala Lys Gly Gln Glu Leu Phe 120 Asp Gln Ile Met Tyr His Leu Asp Leu Ile Glu Ser Asp Tyr Phe Gly 135 Leu Arg Phe Met Asp Ser Ala Gln Val Ala His Trp Leu Asp Gly Thr 150 155 Lys Ser Ile Lys Lys Gln Val Lys Ile Gly Ser Pro Tyr Cys Leu His 165 170 Leu Arg Val Lys Phe Tyr Ser Ser 180

<210> 764 <211> 138 <212>Amino acid <213> Homo sapiens

Glu Ser Arg Glu Arg Ser Gly Asn Arg Arg Gly Ala Glu Asp Arg Gly Thr Cys Gly Leu Gln Ser Pro Ser Ala Met Leu Gly Ala Lys Pro His Trp Leu Pro Gly Pro Leu His Ser Pro Gly Leu Pro Leu Val Leu Val 40 Leu Leu Ala Leu Gly Ala Gly Trp Ala Gln Glu Gly Ser Glu Pro Val 55 Leu Leu Glu Gly Glu Cys Leu Val Val Cys Glu Pro Gly Arg Ala Ala 70 Ala Gly Gly Pro Gly Gly Ala Ala Leu Gly Glu Ala Pro Pro Gly Arg 85 90 Val Ala Phe Ala Ala Val Arg Ser His His His Glu Pro Ala Gly Glu 105 110 Thr Gly Asn Gly Thr Ser Gly Ala Ile Tyr Phe Asp Gln Val Leu Val 120 Asn Glu Gly Gly Phe Asp Arg Ala Ser

<210> 765 <211> 168 <212>Amino acid <213> Homo sapiens

Val Val Ile His Arg Ser Ala Gly Thr Gly Arg Ser Ser Thr Phe Ser 75 Val Val His Thr Cys Leu Val Leu Met Glu Lys Gly Asp Asp Ile Asn 85 90 Ile Lys Gln Val Leu Leu Asn Ile Arg Lys Phe Gln Met Gly Leu Ile 105 110 Gln Thr Pro Asp Gln Leu Arg Phe Ser Tyr Met Ala Ile Thr Glu Gly 120 Ala Lys Cys Val Lys Gly Asp Ser Ser Ile Gln Lys Arg Trp Lys Glu 135 140 Leu Ser Lys Glu Asp Leu Pro Pro Ala Phe Asp His Ser Pro Asn Lys 150 155 Ile Met Thr Glu Lys Tyr Asn Arg 165

<210> 766 <211> 255 <212>Amino acid <213> Homo sapiens

<400> 766 Leu Asn Arg Gln Arg Cys Gly Asp Gln Val Leu Val Pro Gly Thr Gly 10 Leu Ala Ala Ile Leu Arg Thr Leu Pro Met Phe His Asp Glu Glu His 25 Ala Arg Ala Arg Gly Leu Ser Glu Asp Thr Leu Val Leu Pro Pro Ala 40 Ser Arg Asn Gln Arg Ile Leu Tyr Thr Val Leu Glu Cys Gln Pro Leu Phe Asp Ser Ser Asp Met Thr Ile Ala Glu Trp Val Cys Leu Ala Gln 70 Thr Ile Lys Arg His Tyr Glu Gln Tyr His Gly Phe Val Val Ile His 85 90 Gly Thr Asp Thr Met Ala Phe Ala Ala Ser Met Leu Ser Phe Met Leu 105 Glu Asn Leu Gln Lys Thr Val Ile Leu Thr Gly Ala Gln Val Pro Ile 120 His Ala Leu Trp Ser Asp Gly Arg Glu Asn Leu Leu Gly Ala Leu Leu 135 140 Met Ala Gly Gln Tyr Val Ile Pro Glu Val Cys Leu Phe Phe Gln Asn 150 155 Gln Leu Phe Arg Gly Asn Arg Ala Thr Lys Val Asp Ala Arg Arg Phe 170 Ala Ala Phe Cys Ser Pro Asn Leu Leu Pro Leu Ala Thr Val Gly Ala 185 190 Asp Ile Thr Ile Asn Arg Glu Leu Val Arg Lys Val Asp Gly Lys Ala 200 Gly Leu Val Val His Ser Ser Met Glu Gln Asp Val Gly Leu Leu Arg 215 . 220 Leu Tyr Pro Gly Ile Pro Ala Ala Leu Val Arg Ala Phe Leu Gln Pro 230 235 Pro Leu Lys Gly Val Val Met Glu Thr Phe Gly Ser Gly Asn Gly 245 250

<210> 767 <211> 260 <212>Amino acid <213> Homo sapiens

<400> 767 Leu Phe Arg Leu Ala Pro Gly Phe Leu Arg Ser Leu Ala Arg Gln Gly Tyr His Gln Ile Trp Ala Phe Pro Phe Leu Pro Ser Gly Ala Thr Ala 25 Thr Trp Pro.Ala Ala Ser Arg Ser Arg Ser Leu Ala Ala Arg Ser Leu 40 Pro Arg Ser Pro Ala Arg Pro Gly Pro Asn Asp Ala Leu Leu Gly Glu 55 His Asp Phe Arg Gly Gln Gly Val Arg Ala Gln Arg Phe Arg Phe Ser 70 75 Glu Glu Pro Gly Pro Gly Ala Asp Gly Ala Val Leu Glu Val His Val 90 Pro Gln Ile Gly Ala Gly Val Ser Leu Pro Gly Ile Leu Ala Ala Lys 1.00 105 Cys Gly Ala Glu Val Ile Leu Ser Asp Ser Ser Glu Leu Pro His Cys 120 125 Leu Glu Val Cys Arg Gln Ser Cys Gln Met Asn Asn Leu Pro His Leu 140 135 Gln Val Val Gly Leu Thr Trp Gly His Ile Ser Trp Asp Leu Leu Ala 150 155 Leu Pro Pro Gln Asp Ile Ile Leu Ala Ser Asp Val Phe Phe Glu Pro 165 170 Glu Asp Phe Glu Asp Ile Leu Ala Thr Ile Tyr Phe Leu Met His Lys 185 Asn Pro Lys Val Gln Leu Trp Ser Thr Tyr Gln Val Arg Ser Ala Asp 195 200 Trp Ser Leu Glu Ala Leu Leu Tyr Lys Trp Asp Met Lys Cys Val His 215 220 Ile Pro Leu Glu Ser Phe Asp Ala Asp Lys Glu Asp Ile Ala Glu Ser 230 235 · 240 Thr Leu Pro Gly Arg His Thr Val Glu Met Leu Val Ile Ser Phe Ala 250 Lys Asp Ser Leu 260

<210> 768
<211> 200
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(200)

<223> X = any amino acid or stop code

50 55 60 Gly Ile Arg Glu Val Arg Leu Phe Asn Ala Val Val Arg Trp Ser Glu 70 75 Ala Glu Cys Gln Arg Gln Gln Leu Gln Val Thr Pro Glu Asn Arg Arg 85 90 Lys Val Leu Gly Lys Ala Leu Gly Leu Ile Arg Phe Pro Leu Met Thr 100 105 Ile Glu Glu Phe Ala Ala Gly Asn Arg Ala Arg Ala Gln Gly Leu Val 120 125 Trp Glu Gly Ser Gly Thr Gln Val Gly Ile Trp Cys Thr Glu Asp Ser 135 140 Ala Pro Glu Phe Thr Ala Glu Ser Leu Ala Asp Ala Trp His Ile Gln 150 155 Ile Gly Arg Asn Leu Ala Cys Glu Asp Ala Ser Thr Trp Ala Ile Cys 165 170 Xaa Pro Arg Pro Gly Ser Val Pro Thr Val His Thr Ala Arg Pro Arg 185 Leu Ser Cys Leu Ser Ser Cys Phe 195

<210> 769 <211> 33 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(33)

<223> X = any amino acid or stop code

<210> 770 <211> 599 <212>Amino acid <213> Homo sapiens

Ala	Phe	Glu	Ser	Arg 85		Ser	Arg	Leu	Lys 90	_	Ala	Ser	Ser	Glu 95	
Thr	Leu	Asn	Lys 100		Gly	Ser	Thr	Ala 105		Ser	Gly	Val	Val	Arg	
Lys	Lys	Thr 115	Ala	Thr	Ala	Gly	Ala 120	Ile		Glu	Leu	Thr 125	Glu		Arg
Leu	Arg	Ser	Gly	Thr	Gly	Ala 135	Phe		Thr	Thr	Lys 140			Gly	Ile
Pro 145			Arg	Glu	Phe 150	Ser		Thr	Val	Ser 155		Glu	Arg	Ser	Val 160
	Arg	Gly	.Pro	Ser	Asn		Arg	Lys	Ser		Ser	Ser	Pro	Thr 175	Ser
Ser	Asn	Thr	Pro 180			Thr	Lys	His 185		Arg	Thr	Pro	Ser 190		
Pro	Lys	Gln 195	Glu	Asn	Glu	Gly	Gly 200		Lys	Val	Arg	Leu 205		Pro	Lys
Phe	Arg 210	Glu	Leu	Leu	Ala	Glu 215		Lys	Ala	Lys	Asp 220	Ser	Glu	Ile	Asn
Arg 225	Leu	Arg	Ser	Glu	Leu 230	Lys	Lys	Тут	Lys	Glu 235	Lys	Arg	Thr	Leu	Asn 240
Ala	Glu	Gly	Thr	Asp 245	Ala	Leu	Gly	Pro	Asn 250	Val	Asp	Gly	Thr	Ser 255	
Ser	Pro	Gly	Asp 260	Thr	Glu	Pro	Met	Ile 265		Ala	Leu	Glu	Glu 270	Lys	Asn
		275					280					285		_	
	290		Lys			295					300				_
305		•	His		310					315					320
			Phe	325					330					335	
			Lys 340					345					350		
		355	Ser				360					365			
	370		His			375					380				
385			Pro		390					395			-		400
			Val	405					410					415	
			Glu 420					425					430		
_		435	Glu			~	440					445			
	450		Glu	_		455			_		460				
465			His		470					475					480
			Asn	485					490	-				495	
			Gly 500					505					510		
		515	Gly				520					525			
	530		Cys			535					540				
ьеи 545	GIU	мес	Ile	гла	Arg 550	ьeu	гуѕ	GLU	GLU	Asn 555	Glu	гÀг	ьeu	Asn	GLu 560
	Leu	Glu	Leu	Glu 565		His	Asn	Asn	Asn 570		Met	Ala	Lys	Thr 575	
Glu	Glu	Cys	Arg 580	Val	Thr	Leu	Glu	Gly 585		Lys	Met	Glu	Asn 590		Ser

Leu Lys Ser His Leu Gln Gly 595 599

> <210> 771 <211> 103 <212>Amino acid <213> Homo sapiens

<400> 771 Ser Gln Met His Arg Leu Ile Phe Val Tyr Thr Leu Ile Cys Ala Asn Phe Cys Ser Cys Arg Asp Thr Ser Ala Thr Pro Gln Ser Ala Ser Ile 20 25 Lys Ala Leu Arg Asn Ala Asn Leu Arg Arg Asp Glu Ser Asn His Leu 40 Thr Asp Leu Tyr Arg Arg Asp Glu Thr Ile Gln Val Lys Gly Asn Gly 55 60 Tyr Val Gln Ser Pro Arg Phe Pro Asn Ser Tyr Pro Arg Asn Leu Leu 70 75 Leu Thr Trp Arg Leu His Ser Gln Glu Asn Thr Arg Ile Gln Leu Val 85 Phe Asp Asn Gln Phe Gly Leu 100

<210> 772 <211> 218 <212>Amino acid <213> Homo sapiens

<400> 772 Pro Phe Lys Lys Met Thr Asp Leu Leu Arg Ser Val Val Thr Val Ile 10 Asp Val Phe Tyr Lys Tyr Thr Lys Gln Asp Gly Glu Cys Gly Thr Leu 20 25 Ser Lys Gly Glu Leu Lys Glu Leu Leu Glu Lys Glu Leu His Pro Val 40 Leu Lys Asn Pro Asp Asp Pro Asp Thr Val Asp Val Ile Met His Met 55 Leu Asp Arg Asp His Asp Arg Arg Leu Asp Phe Thr Glu Phe Leu Leu 70 75 Met Ile Phe Lys Leu Thr Met Ala Cys Asn Lys Val Leu Ser Lys Glu 85 90 Tyr Cys Lys Ala Ser Gly Ser Lys Lys His Arg Arg Gly His Arg His 105 Gln Glu Glu Glu Ser Glu Thr Glu Glu Asp Glu Glu Asp Thr Pro Gly 120 125 His Lys Ser Gly Tyr Arg His Ser Ser Trp Ser Glu Gly Glu Glu His 135 140 Gly Tyr Ser Ser Gly His Ser Arg Gly Thr Val Lys Cys Arg His Gly 145 150 155 Ser Asn Ser Arg Arg Leu Gly Arg Gln Gly Asn Leu Ser Ser Ser Gly 170 175 Asn Gln Glu Gly Ser Gln Lys Arg Tyr His Arg Ser Ser Cys Gly His 180 185

 Ser Trp Ser Gly Gly Lys Asp Arg His Gly Ser Ser Ser Val Glu Leu

 195
 200
 205

 Arg Glu Arg Ile Asn Lys Ser His Ile Lys
 215
 218

<210> 773 <211> 130 <212>Amino acid <213> Homo sapiens

<400> 773 Val Pro Lys Ile Ser Gly Pro Asp His Ile Asp Phe Ile Pro Trp Asp 10 Gln Leu Phe Met Ala Ser Ser Ser Ser Val Thr Glu Phe Leu Val Leu 20 25 Gly Phe Ser Ser Leu Gly Glu Leu Gln Leu Val Leu Phe Ala Val Phe 40 Leu Cys Leu Tyr Leu Ile Ile Leu Ser Gly Asn Ile Ile Ile Ser 55 Val Ile His Leu Asp His Ser Leu His Thr Pro Met Tyr Phe Phe Leu 70 75 Gly Ile Leu Ser Ile Ser Glu Ile Phe Tyr Thr Thr Val Ile Leu Pro 90 Lys Met Leu Ile Asn Leu Phe Ser Val Phe Arg Thr Leu Ser Phe Val 105 Ser Cys Ala Thr Gln Met Phe Tyr Glu Ile Val Gly Pro Gly Thr Gln Glu Arg 130

<210> 774
<211> 204
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (204)
<223> X = any amino acid or stop code

100 105 Leu Arg Ala Phe Ser Ala Gly Leu Ser Leu Val Gly Leu Leu Thr Leu 115 120 125 Gly Ala Val Leu Ser Ala Ala Ala Thr Val Arg Glu Ala Gln Gly Leu . 135 140 Met Ala Gly Gly Phe Leu Cys Phe Ser Leu Ala Phe Cys Ala Gln Val 150 155 Gln Val Val Phe Trp Arg Leu His Ser Pro Thr Gln Val Glu Asp Ala 165 170 Met Leu Asp Thr Tyr Asp Leu Val Tyr Glu Gln Ala Met Lys Gly Thr .180 1.85 Ser His Val Arg Arg Gln Glu Leu Ala Ala Ile Gln 200

<210> 775 <211> 121 <212>Amino acid <213> Homo sapiens

<400> 775 Gln Pro Gly Tyr Ser Glu Tyr Asp Lys Asn Arg Gly Gln Gly Met Leu 1 5 10 Leu Asn Met Met Cys Gly Arg Gln Leu Ser Ala Ile Ser Leu Cys Leu 25 Ala Val Thr Phe Ala Pro Leu Phe Asn Ala Gln Ala Asp Glu Pro Glu 40 Val Ile Pro Gly Asp Ser Pro Val Ala Val Ser Glu Gln Gly Glu Ala 55 Leu Pro Gln Ala Gln Ala Thr Ala Ile Met Ala Gly Ile Gln Pro Leu 70 75 Pro Glu Gly Ala Ala Glu Lys Ala Arg Thr Gln Ile Glu Ser Gln Leu 90 85 Pro Ala Gly Tyr Lys Pro Val Tyr Leu Asn Gln Leu Gln Leu Leu Tyr 100 105 Ala Ala Arg Gly Ile Ser Cys Ser Val 115 120 121

<210> 776 <211> 142 <212>Amino acid <213> Homo sapiens

<400> 776 Arg Thr Arg Ala Ala Asp Val Tyr Val Phe Ser Leu Thr Gly Lys Ser 1 5 10 Arg Asn Val Ser Ser Ser Thr Val Arg Arg Ser Ala Val Gly Gly Met 20 25 Ser Ala Leu Ala Leu Phe Asp Leu Leu Lys Pro Asn Tyr Ala Leu Ala 40 45 Thr Gln Val Glu Phe Thr Asp Pro Glu Ile Val Ala Glu Tyr Ile Thr 55 Tyr Pro Ser Pro Asn Gly His Gly Glu Val Arg Gly Tyr Leu Val Lys 70 75 Pro Ala Lys Met Ser Gly Lys Thr Pro Ala Val Val Val His Glu

<210> 777 <211> 150 <212>Amino acid <213> Homo sapiens

<400> 777 Val Lys Gln Arg His Gly Asn Ser Leu Leu Thr Thr Glu Thr Lys Cys 10 Ile Ser Cys Arg Leu Gly Val Pro Leu Ser Pro Gln Arg Arg Phe Gln 20 25 Ala Ile Arg Ile Glu Glu Val Lys Leu Arg Trp Phe Ala Phe Leu Ile 40 Val Leu Leu Ala Gly Cys Ser Ser Lys His Asp Tyr Thr Asn Pro Pro 60 Trp Asn Ala Lys Val Pro Val Gln Arg Ala Met Gln Trp Met Pro Ile 75 Ser Gln Lys Ala Gly Ala Ala Trp Gly Val Asp Pro Gln Leu Ile Thr 90 Ala Ile Ile Ala Ile Glu Ser Gly Gly Asn Pro Asn Ala Val Ser Lys 105 Ser Asn Ala Ile Gly Leu Met Gln Leu Lys Ala Ser Thr Ser Gly Arg 120 Asp Val Tyr Arg Arg Met Gly Trp Ser Gly Glu Pro Thr Thr Ser Glu 135 Leu Lys Asn Ser Ser Arg

<210> 778 <211> 296 <212>Amino acid <213> Homo sapiens

<400> 778 His Ala Ala Gly Ile Arg His Glu Ala Lys Pro Lys Arg Ser Phe Tyr 5 10 Ala Ala Arg Asp Leu Tyr Lys Tyr Arg His Gln Tyr Pro Asn Phe Lys 20 25 Asp Ile Arg Tyr Gln Asn Asp Leu Ser Asn Leu Arg Phe Tyr Lys Asn 35 40 Lys Ile Pro Phe Lys Pro Asp Gly Val Tyr Ile Glu Glu Val Leu Ser 55 Lys Trp Lys Gly Asp Tyr Glu Lys Leu Glu His Asn His Thr Tyr Ile 70 75 Gln Trp Leu Phe Pro Leu Arg Glu Gln Gly Leu Asn Phe Tyr Ala Lys 85 90 Glu Leu Thr Thr Tyr Glu Ile Glu Glu Phe Lys Lys Thr Lys Glu Ala

100 105 Ile Arg Arg Phe Leu Leu Ala Tyr Lys Met Met Leu Glu Phe Phe Gly 120 125 Ile Lys Leu Thr Asp Lys Thr Gly Asn Val Ala Arg Ala Val Asn Trp 135 140 Gln Glu Arg Phe Gln His Leu Asn Glu Ser Gln His Asn Tyr Leu Arg 150 155 160 Ile Thr Arg Ile Leu Lys Ser Leu Gly Glu Leu Gly Tyr Glu Ser Phe 170 175 165 Lys Ser Pro Leu Val Lys Phe Ile Leu His Glu Ala Leu Val Glu Asn 185 190 Thr Ile Pro Asn Ile Lys Gln Ser Ala Leu Glu Tyr Phe Val Tyr Thr 200 205 Ile Arg Asp Arg Glu Arg Arg Lys Leu Leu Arg Phe Ala Gln Lys 215 220 His Tyr Thr Pro Ser Glu Asn Phe Ile Trp Gly Pro Pro Arg Lys Glu 230 235 Gln Ser Glu Gly Ser Lys Ala Gln Lys Met Ser Ser Pro Leu Ala Ser 245 250 255 Ser His Asn Ser Gln Thr Ser Met His Lys Lys Ala Lys Asp Ser Lys 260 265 270 Asn Ser Ser Ser Ala Val His Leu Asn Ser Lys Thr Ala Glu Asp Lys 280 . 285 Lys Val Ala Pro Lys Glu Pro Val 295 296

<210> 779 <211> 90 <212>Amino acid <213> Homo sapiens

 400> 779

 Glu Leu Gln Val Phe Gln Pro Ile Gly Gly Met Ser Asp Ser Gly Ser 1
 5
 10
 15
 15

 Gln Leu Gly Ser Met Gly Ser Leu Thr Met Lys Ser Gln Leu Gln Ile 20
 25
 30
 30

 Thr Val Ile Ser Ala Lys Leu Lys Glu Asn Lys Lys Asn Trp Phe Gly 35
 40
 45

 Pro Ser Pro Tyr Val Glu Val Thr Val Asp Gly Gln Ser Lys Lys Thr 50
 55
 60

 Glu Lys Cys Asn Asn Thr Asn Ser Pro Lys Trp Lys Gln Pro Leu Thr 65
 70
 75

 Val Ile Val Thr Pro Val Ser Lys Leu His
 90

<210> 780 <211> 88 <212>Amino acid <213> Homo sapiens

<210> 781 <211> 35 <212>Amino acid <213> Homo sapiens

<210> 782 <211> 145 <212>Amino acid <213> Homo sapiens

<400> 782 Gly Leu Arg Ile Ser Val Gln Glu Arg Ile Lys Ala Cys Phe Thr Glu 5 10 Ser Ile Gln Thr Gln Ile Ala Ala Ala Glu Ala Leu Pro Asp Ala Ile 25 . 30 Ser Arg Ala Ala Met Thr Leu Val Gln Ser Leu Leu Asn Gly Asn Lys 40 Ile Leu Cys Cys Gly Asn Gly Thr Ser Ala Ala Asn Ala Gln His Phe 55 Ala Ala Ser Met Ile Asn Arg Phe Glu Thr Glu Arg Pro Ser Leu Pro 75 Ala Ile Ala Leu Asn Thr Asp Asn Val Val Leu Thr Ala Ile Ala Asn Asp Arg Leu His Asp Glu Val Tyr Ala Lys Gln Val Arg Ala Leu Gly 105 His Ala Gly Asp Val Leu Leu Ala Ile Ser Thr Arg Gly Asn Ser Arg 115 125 Asp Ile Val Lys Ala Val Glu Ala Ala Val Thr Arg Asp Thr Thr Ile 135 140 Val 145

<210> 783 <211> 102 <212>Amino acid

<213> Homo sapiens

<400> 783

Lys Gln Thr Gln His Ala Pro Gly Met Met Lys Lys Tyr Leu Ala Leu 5 10 Ala Leu Ile Ala Pro Leu Leu Ile Ser Cys Ser Thr Thr Lys Lys Gly . 20 Asp Thr Tyr Asn Glu Ala Trp Val Lys Asp Thr Asn Gly Phe Asp Ile 35 40 Leu Met Gly Gln Phe Ala His Asn Ile Glu Asn Ile Trp Gly Phe Lys 55 Glu Val Val Ile Ala Gly Pro Lys Asp Tyr Val Lys Tyr Thr Asp Gln 70 75 Tyr Gln Thr Arg Ser His Ile Asn Phe Asp Asp Gly Thr Ile Thr Ile 85 90 Glu Pro Ile Pro Gly Thr 100 102

<210> 784 <211> 78 <212>Amino acid <213> Homo sapiens

<400> 784

<210> 785 <211> 148 <212>Amino acid · <213> Homo sapiens

<400> 785

<210> 786 <211> 246 <212>Amino acid <213> Homo sapiens

<400> 786 Leu Gly Thr Val Ser Tyr Gly Ala Asp Thr Met Asp Glu Ile Gln Ser His Val Arg Asp Ser Tyr Ser Gln Met Gln Ser Gln Ala Gly Gly Asn 25 . 30 Asn Thr Gly Ser Thr Pro Leu Arg Lys Ala Gln Ser Ser Ala Pro Lys 35 40 45 Val Arg Lys Ser Val Ser Ser Arg Ile His Glu Ala Val Lys Ala Ile 50 55 Val Leu Cys His Asn Val Thr Pro Val Tyr Glu Ser Arg Ala Gly Val 65 70 75 80 Thr Glu Glu Thr Glu Phe Ala Glu Ala Asp Gln Asp Phe Ser Asp Glu 85 90. 95 Asn Arg Thr Tyr Gln Ala Ser Ser Pro Asp Glu Val Ala Leu Val Gln 100 105 110 Trp Thr Glu Ser Val Gly Leu Thr Leu Val Ser Arg Asp Leu Thr Ser 115 120 125 Met Gln Leu Lys Thr Pro Ser Gly Gln Val Leu Ser Phe Cys Ile Leu 135 Gln Leu Phe Pro Phe Thr Ser Glu Ser Lys Arg Met Gly Val Ile Val 145 150 155 Arg Asp Glu Ser Thr Ala Glu Ile Thr Phe Tyr Met Lys Gly Ala Asp 170 Val Ala Met Ser Pro Ile Val Gln Tyr Asn Asp Trp Leu Glu Glu 180 185 190 Cys Gly Asn Met Ala Arg Glu Gly Leu Arg Thr Leu Val Val Ala Lys 200 205 Lys Ala Leu Thr Glu Glu Gln Tyr Gln Asp Phe Glu Val Ser Arg Leu 215 Pro Gly Ile Pro Ser Ser Tyr Asp Gly Ala Phe Leu Thr Leu Lys Leu 225 230 235 Val Leu Pro Val Phe Val 245 246

<210> 787 <211> 176 <212>Amino acid <213> Homo sapiens

<400> 787 Glu Gly Pro His Arg Arg Leu Phe Gln Met Val Lys Ala Leu Gln Glu Ala Pro Glu Asp Pro Asn Gln Ile Leu Ile Gly Tyr Ser Arg Gly Leu 25 Val Val Ile Trp Asp Leu Gln Gly Ser Arg Val Leu Tyr His Phe Leu 40 Ser Ser Gln Gln Leu Glu Asn Ile Trp Trp Gln Arg Asp Gly Arg Leu . 55 Leu Val Ser Cys His Ser Asp Gly Ser Tyr Cys Gln Trp Pro Val Ser 70 Ser Glu Ala Gln Gln Pro Glu Pro Leu Arg Ser Leu Val Pro Tyr Gly 85 90 Pro Phe Pro Cys Lys Ala Ile Thr Arg Ile Leu Trp Leu Thr Thr Arg 100 105 Gln Gly Leu Pro Phe Thr Ile Phe Gln Gly Gly Met Pro Arg Ala Ser 115 120 Tyr Gly Asp Arg His Cys Ile Ser Val Ile His Asp Gly Gln Gln Thr 130 135 140 Ala Phe Asp Phe Thr Ser Arg Val Ile Gly Phe Thr Val Leu Thr Glu 150 155 Ala Asp Pro Ala Ala Ser Arg Arg Ala Ser Gly Val Gly Ala Gln Gly 165 170

<210> 788 <211> 180 <212>Amino acid <213> Homo sapiens

180

<400> 788 Lys Gln Gly Leu Glu Val Arg Asp Leu His Phe Lys Glu Ile Thr Ser 10 Gly Arg Ala Leu Leu Arg Val Ala Cys Lys Arg Pro Ser Met Val Pro 25 Gly Gly Gln Leu Gln Arg Ala Gly Ala Gly Ala Gln Ala Arg Ile Thr 40 Gly Leu Ser Pro Ala Leu Trp Gly Ala Arg Val His Gly Trp Ile Pro Glu Leu Pro Ala Gly Leu Pro Pro Gly Ala Cys Leu Trp Pro Leu Ile Pro Ala Cys Pro Ser Arg His Trp Gly Trp Val Ser Ala Pro Val Lys Gly Trp Ala Gln Ala Ile Leu Gly Leu Ala Leu Cys Leu Arg Gly Glu His Arg Gly Leu Gly Ala Gly Val Ser Lys Val Arg Ser Leu Lys Met 120 125 Asp Arg Lys Val Trp Thr Glu Thr Leu Ile Glu Val Gly Met Pro Leu 135 Leu Ala Thr Asp Thr Trp Gly Leu Pro His Ser Thr Ala Val Trp Val 150 155 Ser Gln Pro Pro Pro Tyr Leu Ser Asp His Ser Thr Leu Glu Leu Glu 170 Arg Asp Pro Leu

<210> 789 <211> 145 <212>Amino acid <213> Homo sapiens

<400> 789 Leu Ser Cys Asn Ser Glu Gln Ala Leu Leu Ser Leu Val Pro Val Gln 10 Arg Glu Leu Leu Arg Arg Tyr Gln Ser Ser Pro Ala Lys Pro Asp 25 Ser Ser Phe Tyr Lys Gly Leu Gly Thr Cys Pro Ser Gln Leu Arg Leu 40 Ser Glu Pro Pro Pro Thr Pro Arg His Leu Ser Val Ala Ser Val Ser 55 His His Met Phe Pro Ser His Arg Ser Leu Cys Pro His Leu Pro Asp 70 75 Phe Phe Ala Ala Pro Phe Pro Ser Asp Asn Leu Pro Tyr Thr Leu Gln 90 Ser Pro Phe Pro Ser Pro Pro Pro Ala Thr Pro Ser Asp His Ala Leu 100 105 110 Ile Leu His His Asp Leu Asn Gly Gly Pro Asp Asp Pro Leu Gln Gln 115 120 Thr Gly Gln Leu Phe Gly Gly Leu Val Arg Asp Ile Arg Arg Tyr 135 Pro 145

<210> 790 <211> 65 <212>Amino acid <213> Homo sapiens

<210> 791 <211> 144 <212>Amino acid <213> Homo sapiens

<400> 791 Arg Val Asp Pro Arg Val Arg Ala Pro Arg Cys Gly Asp Lys Ile Lys 10 Asn His Met Tyr Lys Cys Asp Cys Gly Ser Leu Lys Asp Cys Ala Ser Asp Arg Cys Cys Glu Thr Ser Cys Thr Leu Ser Leu Gly Ser Val Cys 40 Asn Thr Gly Leu Cys Cys His Lys Cys Lys Tyr Ala Ala Pro Gly Val 55 Val Cys Arg Asp Leu Gly Gly Ile Cys Asp Leu Pro Glu Tyr Cys Asp 70 75 Gly Lys Lys Glu Glu Cys Pro Asn Asp Ile Tyr Ile Gln Asp Gly Thr 85 90 Pro Cys Ser Ala Val Ser Val Cys Ile Arg Gly Asn Cys Ser Asp Arg 100 105 Asp Met Gln Cys Gln Ala Leu Phe Gly Tyr Gln Val Lys Asp Gly Ser 115 120 125 Pro Ala Cys Tyr Arg Lys Leu Asn Arg Ile Gly Asn Arg Phe Gly Thr 135 140

<210> 792 <211> 242 <212>Amino acid <213> Homo sapiens

<400> 792 Pro Gly Arg Pro Thr Arg Pro Asp Ala Ser Leu Ala Gln Asp Pro Arg Thr Thr Met Phe Arg Ile Pro Glu Phe Lys Trp Ser Pro Met His Gln 20 25 Arg Leu Leu Thr Asp Leu Leu Phe Ala Leu Glu Thr Asp Val His Val 40 Trp Arg Ser His Ser Thr Lys Ser Val Met Asp Phe Val Asn Ser Asn · 55 Glu Asn Ile Ile Phe Val His Asn Thr Ile His Leu Ile Ser Gln Met 75 Val Asp Asn Ile Ile Ile Ala Cys Gly Gly Ile Leu Pro Leu Leu Ser 90 Ala Ala Thr Ser Pro Thr Gly Ser Lys Thr Glu Leu Glu Asn Ile Glu 100 105 Val Thr Gln Gly Met Ser Ala Glu Thr Ala Val Thr Phe Leu Ser Arg 120 Leu Met Ala Met Val Asp Val Leu Val Phe Ala Ser Ser Leu Asn Phe 135 Ser Glu Ile Glu Ala Glu Lys Asn Met Ser Ser Gly Gly Leu Met Arg 150 155 Gln Cys Leu Lys Leu Val Cys Cys Val Ala Val Arg Asn Cys Leu Glu 170 175 165 Cys Arg Gln Arg Gln Arg Asp Arg Gly Asn Lys Ser Ser His Gly Ser 185 Ser Lys Pro Gln Glu Val Pro Gln Ser Val Thr Ala Thr Ala Ala Ser 195 200 Lys Thr Pro Leu Glu Asn Val Pro Gly Asn Leu Ser Pro Ile Lys Asp 215 220 Pro Asp Arg Leu Leu Gln Asp Val Asp Ile Asn Arg Leu Arg Ala Val 230 235 Val Phe

242

<210> 793 <211> 412 <212>Amino acid <213> Homo sapiens

<400> 793 Asn Ser Ser Gly Val Lys Leu Leu Gln Ala Leu Gly Leu Ser Pro Gly 10 Asn Gly Lys Asp His Ser Ile Leu His Ser Arg Asn Asp Leu Glu Glu 25 Ala Phe Ile His Phe Met Gly Lys Gly Ala Ala Ala Glu Arg Phe Phe 40 Ser Asp Lys Glu Thr Phe His Asp Ile Ala Gln Val Ala Ser Glu Phe 55 Pro Gly Ala Gln His Tyr Val Gly Gly Asn Ala Ala Leu Ile Gly Gln 70 75 Lys Phe Ala Ala Asn Ser Asp Leu Lys Val Leu Leu Cys Gly Pro Val Gly Pro Lys Leu His Glu Leu Leu Asp Asp Asn Val Phe Val Pro Pro 100 105 Glu Ser Leu Gln Glu Val Asp Glu Phe His Leu Ile Leu Glu Tyr Gln 115 120 Ala Gly Glu Glu Trp Gly Gln Leu Lys Ala Pro His Ala Asn Arg Phe 130 135 Ile Phe Ser His Asp Leu Ser Asn Gly Ala Met Asn Met Leu Glu Val 145 150 155 160 Phe Val Ser Ser Leu Glu Glu Phe Gln Pro Asp Leu Gly Gly Leu Ser 165 170 175 Gly Leu His Met Met Glu Gly Gln Ser Lys Glu Leu Gln Arg Lys Arg 180 185 190 Leu Leu Glu Val Val Thr Ser Ile Ser Asp Ile Pro Thr Gly Ile Pro 195 200 205 Val His Leu Glu Leu Gly Ser Met Thr Asn Arg Glu Leu Met Ser Ser 215 220 Ile Val Leu Gln Gln Val Phe Pro Ala Val Thr Ser Leu Gly Leu Asn 230 235 Glu Gln Glu Leu Leu Phe Leu Thr Gln Ser Ala Ser Gly Pro His Ser 250 Ser Leu Ser Ser Trp Asn Gly Val Pro Asp Val Gly Met Val Ser Asp 265 Ile Leu Phe Trp Ile Leu Lys Glu His Gly Arg Ser Lys Ser Arg Ala 280 Ser Asp Leu Thr Arg Ile His Phe His Thr Leu Val Tyr His Ile Leu 295 Ala Thr Val Asp Gly His Trp Ala Asn Gln Leu Ala Ala Val Ala Ala 310. 315 Gly Ala Arg Val Ala Gly Thr Gln Ala Cys Ala Thr Glu Thr Ile Asp 325 330 Thr Ser Arg Val Ser Leu Arg Ala Pro Gln Glu Phe Met Thr Ser His 340 345 Ser Glu Ala Gly Ser Arg Ile Val Leu Asn Pro Asn Lys Pro Val Val 360 365 Glu Trp His Arg Glu Gly Ile Ser Phe His Phe Thr Pro Val Leu Val 375 Cys Lys Asp Pro Ile Arg Thr Val Gly Leu Gly Asp Ala Ile Ser Ala 390 Glu Gly Leu Phe Tyr Ser Glu Val His Pro His Tyr

405 410 412

<210> 794 <211> 83 <212>Amino acid <213> Homo sapiens

<210> 795 <211> 391 <212>Amino acid <213> Homo sapiens

Glu Leu Leu

83

<400> 795 Leu Gly Glu Val Leu Lys Cys Gln Gln Gly Val Ser Ser Leu Ala Phe Ala Leu Ala Phe Leu Gln Arg Met Asp Met Lys Pro Leu Val Val Leu 20 Gly Leu Pro Ala Pro Thr Ala Pro Ser Gly Cys Leu Ser Phe Trp Glu 40 Ala Lys Ala Gln Leu Ala Lys Ser Cys Lys Val Leu Val Asp Ala Leu 55 Arg His Asn Ala Ala Ala Val Pro Phe Phe Gly Gly Ser Val Leu Arg Ala Ala Glu Pro Ala Pro His Ala Ser Tyr Gly Gly Ile Val 85 90 Ser Val Glu Thr Asp Leu Leu Gln Trp Cys Leu Glu Ser Gly Ser Ile 100 105 Pro Ile Leu Cys Pro Ile Gly Glu Thr Ala Ala Arg Arg Ser Val Leu 120 Leu Asp Ser Leu Glu Val Thr Ala Ser Leu Ala Lys Ala Leu Arg Pro 135 140 Thr Lys Ile Ile Phe Leu Asn Asn Thr Gly Gly Leu Arg Asp Ser Ser 150 155 His Lys Val Leu Ser Asn Val Asn Leu Pro Ala Asp Leu Asp Leu Val 165 170 Cys Asn Ala Glu Trp Val Ser Thr Lys Glu Arg Gln Gln Met Arg Leu 185 Ile Val Asp Val Leu Ser Arg Leu Pro His His Ser Ser Ala Val Ile 200 Thr Ala Ala Ser Thr Leu Leu Thr Glu Leu Phe Ser Asn Lys Gly Ser

215 Gly Thr Leu Phe Lys Asn Ala Glu Arg Met Leu Arg Val Arg Ser Leu 230 235 Asp Lys Leu Asp Gln Gly Arg Leu Val Asp Leu Val Asn Ala Ser Phe 250 245 Gly Lys Lys Leu Arg Asp Asp Tyr Leu Ala Ser Leu Arg Pro Arg Leu 265 His Ser Ile Tyr Val Ser Glu Gly Tyr Asn Ala Ala Ile Leu Thr 280 Met Glu Pro Val Leu Gly Gly Thr Pro Tyr Leu Asp Lys Phe Val Val 290 . 295 Ser Ser Ser Arg Gln Gly Gln Gly Ser Gly Gln Met Leu Trp Glu Cys 305 310 315 Leu Arg Arg Asp Leu Gln Thr Leu Phe Trp Arg Ser Arg Val Thr Asn 325 330 Pro Ile Asn Pro Trp Tyr Phe Lys His Ser Asp Gly Ser Phe Ser Asn .345 Lys Gln Trp Ile Phe Phe Trp Phe Gly Leu Ala Asp Ile Arg Asp Ser 360 Tyr Glu Leu Val Asn His Ala Lys Gly Leu Pro Asp Ser Phe His Lys 375 Pro Ala Ser Asp Pro Gly Ser 390 391

<210> 796 <211> 127 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(127) <223> X = any amino acid or stop code

· <400> 796 Tyr His Ala Pro Ala Leu Gln Pro Gly Gln Gln Ser Lys Thr Leu Ser 10 Gln Glu Lys Lys Asn Phe Phe Arg Pro Gly Ala Val Ala His Thr Cys 2.0 25 Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg Ile Thr Arg Ser Gly 40 Asp Arg Asp His Pro Gly Xaa His Gly Glu Thr Pro Ser Leu Leu Lys 55 Ile Gln Lys Lys Leu Ala Gly Arg Asp Gly Gly Arg Leu Xaa Ser Gln 70 75 Leu Leu Gly Arg Leu Arg Gln Glu Asn Gly Val Asn Pro Gly Gly Gly 90 Gly Cys Ser Glu Pro Arg Leu Arg His Cys Thr Pro Ala Trp Kaa Gln 105 Ser Glu Thr Ile Ser Arg Lys Lys Arg Lys Lys Glu Arg Lys Tyr 120 125 127

<210> 797 <211> 159 <212>Amino acid <213> Homo sapiens

<400> 797 Phe Arg Pro Ile Gly Ile Ile Arg Gln Ala Leu Cys Ser Ala Asp Gly 10 His Gln Arg Arg Ile Leu Thr Leu Arg Leu Gly Leu Leu Val Ile Pro 25 Phe Leu Pro Ala Ser Asn Leu Phe Phe Arg Val Gly Phe Val Val Pro 40 Ser Val Gly Cys Cys Val Met Leu Leu Phe Gly Phe Gly Ala Leu Arg 55 Lys His Thr Glu Lys Lys Leu Ile Ala Ala Val Val Leu Gly Ile 70 75 Leu Leu Ser Asn Asp Ala Glu Arg Leu Arg Cys Ala Val Arg Gly Gly 85 90 Glu Trp Arg Ser Glu Glu Ala Val Phe Arg Gly Ala Val Ser Val Cys 105 Pro Leu Ser Ala Glu Val Arg Cys Asn Ile Gly Arg Asn Leu Ala Ala 120 Lys Gly Asn Gln Thr Gly Ala Ile Arg Tyr His Arg Glu Ala Val Ser 135 140 Leu Asn Pro Lys Thr Lys Ser Ser Thr Arg Glu Phe Arg Pro Cys 150 155

<210> 798 <211> 236 <212>Amino acid <213> Homo sapiens

<400> 798 Lys Ile Ala Asp Phe Gly Phe Ser Asn Leu Phe Thr Pro Gly Gln Leu Leu Lys Thr Trp Cys Gly Ser Pro Pro Tyr Ala Ala Pro Glu Leu Phe Glu Gly Lys Glu Tyr Asp Gly Pro Lys Val Asp Ile Trp Ser Leu Gly Val Val Leu Tyr Val Leu Val Cys Gly Ala Leu Pro Phe Asp Gly Ser 55 Thr Leu Gln Asn Leu Arg Ala Arg Val Leu Ser Gly Lys Phe Arg Ile 70 75 Pro Phe Phe Met Ser Thr Glu Cys Glu His Leu Ile Arg His Met Leu 85 90 Val Leu Asp Pro Asn Lys Arg Leu Ser Met Glu Gln Ile Cys Lys His 105 Lys Trp Met Lys Leu Gly Asp Ala Asp Pro Asn Phe Asp Arg Leu Ile 120 Ala Glu Cys Gln Gln Leu Lys Glu Glu Arg Gln Val Asp Pro Leu Asn 135 140 Glu Asp Val Leu Leu Ala Met Glu Asp Met Gly Leu Asp Lys Glu Gln 155 Thr Leu Gln Ser Leu Arg Ser Asp Ala Tyr Asp His Tyr Ser Ala Ile 170 Tyr Ser Leu Leu Cys Asp Arg His Lys Arg His Lys Thr Leu Arg Leu 185 Gly Ala Leu Pro Ser Met Pro Arg Ala Leu Gly Leu Ser Ser Thr Ser 200 205 Gln Tyr Pro Ala Glu Gln Ala Gly Thr Ala Met Asn Ile Ser Val Pro 210 220

Gln Val Gln Leu Ile Asn Pro Glu Asn Gln Ile Val 225 230 235 236

<210> 799
<211> 114
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(114)
<223> X = any amino acid or stop code

<210> 800
<211> 328
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(328)
<223> X = any amino acid or stop code

<400> 800 Val Pro Pro Lys Met Lys Arg Gly Thr Ser Leu His Ser Arg Arg Gly 10 Lys Pro Glu Ala Pro Lys Gly Ser Pro Gln Ile Asn Arg Lys Ser Gly 20 25 Gln Glu Met Thr Ala Val Met Gln Ser Gly Arg Pro Arg Ser Ser Ser 40 Thr Thr Asp Ala Pro Thr Gly Ser Ala Met Met Glu Ile Ala Cys Ala 55 Ala Ala Ala Ala Ala Ala Cys Leu Pro Gly Glu Glu Gly Thr Ala 70 75 Glu Arg Ile Glu Arg Leu Glu Val Ser Ser Leu Ala Gln Thr Ser Ser 85 90

Ala Val Ala Ser Ser Thr Asp Gly Ser Ile His Thr Asp Ser Val Asp 105 Gly Thr Pro Asp Pro Gln Arg Thr Lys Ala Ala Ile Ala His Leu Gln 120 Gln Lys Ile Leu Lys Leu Thr Glu Gln Ile Lys Ile Ala Gln Thr Ala 135 140 Arg Arg Asn Arg Arg Pro Gly Ser Xaa Lys Asp Cys Thr Pro Xaa Lys 150 155 Cys Leu Arg Lys Ser Asp Glu Ala Leu Asn Arg Val Leu Gln Gln Ile 165 170 Arg Val Pro Pro Lys Met Lys Arg Gly Thr Ser Leu His Ser Arg Arg 185 Gly Lys Pro Glu Ala Pro Lys Gly Ser Pro Gln Ile Asn Arg Lys Ser 200 Gly Gln Glu Met Thr Ala Val Met Gln Ser Gly Arg Pro Arg Ser Ser 215 220 Ser Thr Thr Asp Ala Pro Thr Gly Ser Ala Met Met Glu Ile Ala Cys 230 235 Ala Ala Ala Ala Ala Ala Cys Leu Pro Gly Glu Glu Gly Thr 245 250 Ala Glu Arg Ile Glu Arg Leu Glu Val Ser Ser Leu Ala Gln Thr Ser 265 Ser Ala Val Ala Ser Ser Thr Asp Gly Ser Ile His Thr Asp Ser Val 280 285 Asp Gly Thr Pro Asp Pro Gln Arg Thr Lys Ala Ala Ile Ala His Leu 295 300 Gln Gln Lys Ile Leu Lys Leu Thr Glu Gln Ile Lys Ile Ala Gln Thr 310 315 Ala Arg Arg Asn Arg Arg Pro Gly 328 325

<210> 801 <211> 356 <212>Amino acid <213> Homo sapiens

<400> 801 Met Gln Thr Ile Glu Arg Leu Val Lys Glu Arg Asp Asp Leu Met Ser 5 Ala Leu Val Ser Val Arg Ser Ser Leu Ala Asp Thr Gln Gln Arg Glu 25 Ala Ser Ala Tyr Glu Gln Val Lys Gln Val Leu Gln Ile Ser Glu Glu 40 Ala Asn Phe Glu Lys Thr Lys Ala Leu Ile Gln Cys Asp Gln Leu Arg 55 Lys Glu Leu Glu Arg Gln Ala Glu Arg Leu Glu Lys Glu Leu Ala Ser 70 75 Gln Gln Glu Lys Arg Ala Ile Glu Lys Asp Met Met Lys Lys Glu Ile 90 Thr Lys Glu Arg Glu Tyr Met Gly Ser Lys Met Leu Ile Leu Ser Gln 105 Asn Ile Ala Gln Leu Glu Ala Gln Val Glu Lys Val Thr Lys Glu Lys 120 125 Ile Ser Ala Ile Asn Gln Leu Glu Glu Ile Gln Ser Gln Leu Ala Ser 135 140 Arg Glu Met Asp Val Thr Lys Val Cys Gly Glu Met Arg Tyr Gln Leu 155 Asn Lys Thr Asn Met Glu Lys Asp Glu Ala Glu Lys Glu His Arg Glu 165 170

Phe Arg Ala Lys Thr Asn Arg Asp Leu Glu Ile Lys Asp Gln Glu Ile 185 Glu Lys Leu Arg Ile Glu Leu Asp Glu Ser Lys Gln His Leu Glu Gln 200 Glu Gln Gln Lys Ala Ala Leu Ala Arg Glu Glu Cys Leu Arg Leu Thr 215 220 Glu Leu Leu Gly Glu Ser Glu His Gln Leu His Leu Thr Arg Gln Glu 230 235 Lys Asp Ser Ile Gln Gln Ser Phe Ser Lys Glu Ala Lys Ala Gln Ala 250 Leu Gln Ala Gln Gln Arg Glu Gln Glu Leu Thr Gln Lys Ile Gln Gln 265 Met Glu Ala Gln His Asp Lys Thr Glu Asn Glu Gln Tyr Leu Leu Leu 280 285 Thr Ser Gln Asn Thr Phe Leu Thr Lys Leu Lys Glu Glu Cys Cys Thr 295 300 Leu Ala Lys Lys Leu Glu Gln Ile Ser Gln Lys Thr Arg Ser Glu Ile 310 . 315 Ala Gln Leu Ser Gln Glu Lys Arg Tyr Thr Tyr Asp Lys Leu Gly Lys 325 330 Leu Gln Arg Arg Asn Glu Glu Leu Glu Glu Gln Cys Val Gln His Gly 345 Arg Ser Thr * 355

<210> 802 <211> 210 <212>Amino acid <213> Homo sapiens

<400> 802 Ser Tyr Pro Val Trp Trp Asn Ser Pro Leu Thr Ala Glu Val Pro Pro 10 Glu Leu Leu Ala Ala Gly Phe Phe His Thr Gly His Gln Asp Lys 20 Val Arg Cys Phe Phe Cys Tyr Gly Gly Leu Gln Ser Trp Lys Arg Gly Asp Asp Pro Trp Thr Glu His Ala Lys Trp Phe Pro Ser Cys Gln Phe Leu Leu Arg Ser Lys Gly Arg Asp Phe Val His Ser Val Gln Glu Thr 70 75 His Ser Gln Leu Leu Gly Ser Trp Asp Pro Trp Glu Glu Pro Glu Asp 85 90 Ala Ala Pro Val Ala Pro Ser Val Pro Ala Ser Gly Tyr Pro Glu Leu 105 Pro Thr Pro Arg Arg Glu Val Gln Ser Glu Ser Ala Gln Glu Pro Gly 120 125 Gly Val Ser Pro Ala Glu Ala Gln Arg Ala Trp Trp Val Leu Glu Pro 135 140 Pro Gly Ala Arg Asp Val Glu Ala Gln Leu Arg Arg Leu Gln Glu Glu 150 155 Arg Thr Cys Lys Val Cys Leu Asp Arg Ala Val Ser Ile Val Phe Val 165 170 Pro Cys Gly His Leu Val Cys Ala Glu Cys Ala Pro Gly Leu Gln Leu 185 190 Cys Pro Ile Cys Arg Ser Pro Cys Gly Pro Leu Arg Pro Cys Leu Trp 200 Val Pro 210

<210> 803 <211> 130 <212>Amino acid <213> Homo sapiens

<210> 804 <211> 458 <212>Amino acid <213> Homo sapiens

<400> 804 Lys Gln Leu Ile Val Leu Gly Asn Lys Val Asp Leu Leu Pro Gln Asp 10 Ala Pro Gly Tyr Arg Gln Arg Leu Arg Glu Arg Leu Trp Glu Asp Cys Ala Arg Ala Gly Leu Leu Leu Ala Pro Gly His Gln Gly Pro Gln Arg Pro Val Lys Asp Glu Pro Gln Asp Gly Glu Asn Pro Asn Pro Pro Asn 60 Trp Ser Arg Thr Val Val Arg Asp Val Arg Leu Ile Ser Ala Lys Thr 70 Gly Tyr Gly Val Glu Glu Leu Ile Ser Ala Leu Gln Arg Ser Trp Arg Tyr Arg Gly Asp Val Tyr Leu Val Gly Ala Thr Asn Ala Gly Lys Ser 105 Thr Leu Phe Asn Thr Leu Leu Glu Ser Asp Tyr Cys Thr Ala Lys Gly Ser Glu Ala Ile Asp Arg Ala Thr Ile Ser Pro Trp Pro Gly Thr Thr 140 Leu Asn Leu Leu Lys Phe Pro Ile Cys Asn Pro Thr Pro Tyr Arg Met 150 Phe Lys Arg His Gln Arg Leu Lys Lys Asp Ser Thr Gln Ala Glu Glu 170

Asp Leu Ser Glu Gln Glu Gln Asn Gln Leu Asn Val Leu Lys Lys His 180 185 Gly Tyr Val Val Gly Arg Val Gly Arg Thr Phe Leu Tyr Ser Glu Glu 200 Gln Lys Asp Asn Ile Pro Phe Glu Phe Asp Ala Asp Ser Leu Ala Phe 215 220 Asp Met Glu Asn Asp Pro Val Met Gly Thr His Lys Ser Thr Lys Gln 230 235 Val Glu Leu Thr Ala Gln Asp Val Lys Asp Ala His Trp Phe Tyr Asp 245 250 Thr Pro Gly. Ile Thr Lys Glu Asn Cys Ile Leu Asn Leu Leu Thr Glu 265 Lys Glu Val Asn Ile Val Leu Pro Thr Gln Ser Ile Val Pro Arg Thr 280 Phe Val Leu Lys Pro Gly Met Val Leu Phe Leu Gly Ala Ile Gly Arg 295 300 Ile Asp Phe Leu Gln Gly Asn Gln Ser Ala Trp Phe Thr Val Val Ala 310 315 Ser Asn Ile Leu Pro Val His Ile Thr Ser Leu Asp Arg Ala Asp Ala 330 Leu Tyr Gln Lys His Ala Gly His Thr Leu Leu Gln Ile Pro Met Gly 345 Gly Lys Glu Arg Met Ala Gly Phe Pro Pro Leu Val Ala Glu Asp Ile 360 Met Leu Lys Glu Gly Leu Gly Ala Ser Glu Ala Val Ala Asp Ile Lys 375 Phe Ser Ser Ala Gly Trp Val Ser Val Thr Pro Asn Phe Lys Asp Arg 390 395 Leu His Leu Arg Gly Tyr Thr Pro Glu Gly Thr Val Leu Thr Val Arg 405 410 Pro Pro Leu Leu Pro Tyr Ile Val Asn Ile Lys Gly Gln Arg Ile Lys 420 425 Lys Ser Val Ala Tyr Lys Thr Lys Lys Pro Pro Ser Leu Met Tyr Asn 440 Val Arg Lys Lys Gly Lys Ile Asn Val. 455

<210> 805 <211> 290 <212>Amino acid <213> Homo sapiens

<400> 805 Ser Thr Val Ala Ser Met Met His Arg Gln Glu Thr Val Glu Cys Leu 10 Arg Lys Phe Asn Ala Arg Arg Lys Leu Lys Gly Ala Ile Leu Thr Thr 20 25 Met Leu Val Ser Arg Asn Phe Ser Ala Ala Lys Ser Leu Leu Asn Lys 40 Lys Ser Asp Gly Gly Val Lys Pro Gln Ser Asn Asn Lys Asn Ser Leu 55 60 Val Ser Pro Ala Glu Pro Ala Pro Leu Gln Thr Ala Met Glu Pro 70 75 Gln Thr Thr Val Val His Asn Ala Thr Asp Gly Ile Lys Gly Ser Thr 85 90 Glu Ser Cys Asn Thr Thr Thr Glu Asp Glu Asp Leu Lys Ala Ala Pro 105 Leu Arg Thr Gly Asn Gly Ser Ser Val Pro Glu Gly Arg Ser Ser Arg 120

Asp Arg Thr Ala Pro Ser Ala Gly Met Gln Pro Gln Pro Ser Leu Cys 130 135 140 Ser Ser Ala Met Arg Lys Gln Glu Ile Ile Lys Ile Thr Glu Gln Leu 150 155 Ile Glu Ala Ile Asn Asn Gly Asp Phe Glu Ala Tyr Thr Lys Ile Cys 165 170 Asp Pro Gly Leu Thr Ser Phe Glu Pro Glu Ala Leu Gly Asn Leu Val 185 Glu Gly Met Asp Phe His Lys Phe Tyr Phe Glu Asn Leu Leu Ser Lys 200 Asn Ser Lys Pro Ile His Thr Thr Ile Leu Asn Pro His Val His Val 215 220 Ile Gly Glu Asp Ala Ala Cys Ile Ala Tyr Ile Arg Leu Thr Gln Tyr 230 235 Ile Asp Gly Gln Gly Arg Pro Ser Asn Pro Ala Lys Ser Glu Glu Thr 245 250 Arg Val Trp His Arg Arg Asp Gly Lys Trp Leu Asn Val His Tyr His 265 Cys Ser Gly Ala Pro Cys Pro His Arg Cys Ser Glu Leu Ser His Arg 280 Gly Phe 290

<210> 806 <211> 570 <212>Amino acid <213> Homo sapiens

<400> 806 Leu Pro Lys Asn Val Val Phe Val Leu Asp Ser Ser Ala Ser Met Val 10 Gly Thr Lys Leu Arg Gln Thr Lys Asp Ala Leu Phe Thr Ile Leu His 20 Asp Leu Arg Pro Gln Asp Arg Phe Ser Ile Ile Gly Phe Ser Asn Arg 40 Ile Lys Val Trp Lys Asp His Leu Ile Ser Val Thr Pro Asp Ser Ile 55 Arg Asp Gly Lys Val Tyr Ile His His Met Ser Pro Thr Gly Gly Thr 70 75 Asp Ile Asn Gly Ala Leu Gln Arg Ala Ile Arg Leu Leu Asn Lys Tyr 85 90 Val Ala His Ser Gly Ile Gly Asp Arg Arg Val Ser Leu Ile Val Phe 105 110 Leu Thr Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile 120 125 Leu Asn Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys Ile Phe Thr 135 140 Ile Gly Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys Leu Ser 150 155 Leu Glu Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu Asp Ala 165 170 Gly Ser Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr Pro Leu Leu 180 185 Ser Asp Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val Val Gln Ala Thr 200 Lys Thr Leu Phe Pro Asn Tyr Phe Asn Gly Ser Glu Ile Ile Ile Ala 215 220 Gly Lys Leu Val Asp Arg Lys Leu Asp His Leu His Val Glu Val Thr 225 230 235

Ala Ser Asn Ser Lys Lys Phe Ile Ile Leu Lys Thr Asp Val Pro Val 250 Arg Pro Gln Lys Ala Gly Lys Asp Val Thr Gly Ser Pro Arg Pro Gly 265 Gly Asp Gly Glu Gly Asp Thr Asn His Ile Glu Arg Leu Trp Ser Tyr 280 Leu Thr Thr Lys Glu Leu Leu Ser Ser Trp Leu Gln Ser Asp Asp Glu 295 300 Pro Glu Lys Glu Arg Leu Arg Gln Arg Ala Gln Ala Leu Ala Val Ser 315 Tyr Arg Phe Leu Thr Pro Phe Thr Ser Met Lys Leu Arg Gly Pro Val 325 330 Pro Arg Met Asp Gly Leu Glu Glu Ala His Gly Met Ser Ala Ala Met 345 Gly Pro Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr Gln Pro 360 Gly Pro Leu Leu Lys Lys Pro Tyr Gln Pro Arg Ile Lys Ile Ser Lys 375 Thr Ser Val Asp Gly Asp Pro His Phe Val Val Asp Phe Pro Leu Ser 390 395 Arg Leu Thr Val Cys Phe Asn Ile Asp Gly Gln Pro Gly Asp Ile Leu 405 410 Arg Leu Val Ser Asp His Arg Asp Ser Gly Val Thr Val Asn Gly Glu 420 425 Leu Ile Gly Ala Pro Ala Pro Pro Asn Gly His Lys Lys Gln Arg Thr 440 Tyr Leu Arg Thr Ile Thr Ile Leu Ile Asn Lys Pro Glu Arg Ser Tyr 455 460 Leu Glu Ile Thr Pro Ser Arg Val Ile Leu Asp Gly Gly Asp Arg Leu 470 475 Val Leu Pro Cys Asn Gln Ser Val Val Val Gly Ser Trp Gly Leu Glu 490 Val Ser Val Ser Ala Asn Ala Asn Val Thr Val Thr Ile Gln Gly Ser 500 505 Ile Ala Phe Val Ile Leu Ile His Leu Tyr Lys Lys Pro Ala Pro Phe 520 Gln Arg His His Leu Gly Phe Tyr Ile Ala Asn Ser Glu Gly Leu Ser . 540 535 Ser Asn Cys Arg Val Phe Cys Glu Ser Gly Ile Leu Ile Gln Glu Leu 550 Thr Gln Gln Ser Val Ala Val Ala Gly Arg 565

<210> 807 <211> 279 <212>Amino acid <213> Homo sapiens

<400> 807

Gly Gln Ser Tyr Lys Pro Val Pro Ala Ile Gln Thr Gln Lys Leu Asn 85 90 Pro Lys Gly Gly Thr Leu His Ala Asp Ala Gln Leu Tyr Ala Asp Arq 100 105 Phe Gln Lys His Gly Met Asp Glu Phe Ile Ser Ala Asn Pro Cys Lys 120 Leu Asp His Ala Phe Leu Phe Arg Ile Leu Gln Arg Gln Thr Leu Asp 135 His Arg Leu Asn Asp Ser Tyr Ser Cys Leu Gly Trp Phe Ser Pro Gly 150 155 Gln Val Phe Val Leu Asp Glu Tyr Cys Ala Arg Tyr Gly Val Arg Gly 170 Cys His Arg His Leu Cys Tyr Leu Ala Glu Leu Met Glu His Ser Glu 185 Asn Gly Ala Val Ile Asp Pro Thr Leu Leu His Tyr Ser Phe Ala Phe 200 205 Cys Ala Ser His Val His Gly Asn Arg Pro Asp Gly Ile Gly Thr Val 215 220 Ser Val Glu Glu Lys Glu Arg Phe Glu Glu Ile Lys Glu Arg Leu Ser 230 235 Ser Leu Leu Glu Asn Gln Ile Ser His Phe Arg Tyr Cys Phe Pro Phe 245 250 Gly Arg Pro Glu Gly Ala Leu Lys Ala Thr Leu Ser Leu Leu Glu Arg 260 265 Val Leu Met Lys Asp Ile Ala

<210> 808 <211> 251 <212>Amino acid <213> Homo sapiens

<221> misc_feature <222> (1)...(251) <223> X = any amino acid or stop code

<400> 808 Asp Gly Leu Leu His Glu Val Leu Asn Gly Leu Leu Asp Arg Pro Asp Trp Glu Glu Ala Val Lys Met Pro Val Gly Ile Leu Pro Cys Gly Ser 20 25 Gly Asn Ala Leu Ala Gly Ala Val Asn Gln His Gly Gly Phe Glu Pro 40 Ala Leu Gly Leu Asp Leu Leu Leu Asn Cys Ser Leu Leu Leu Cys Arg 55 Gly Gly Gly His Pro Leu Asp Leu Leu Ser Val Thr Leu Ala Ser Gly 70 75 Ser Arg Cys Phe Ser Phe Leu Ser Val Ala Trp Gly Phe Val Ser Asp 90 Val Asp Ile Gln Ser Glu Arg Phe Arg Ala Leu Gly Ser Ala Arg Phe 105 Thr Leu Gly Thr Val Leu Gly Leu Ala Thr Leu His Thr Tyr Arg Gly 120 125 Arg Leu Ser Tyr Leu Pro Ala Thr Val Glu Pro Ala Ser Pro Thr Pro 140 Ala His Ser Leu Pro Arg Ala Lys Ser Glu Leu Thr Leu Thr Pro Asp 150 155 Pro Ala Pro Pro Met Ala His Ser Pro Leu His Arg Ser Val Ser Asp

<210> 809 <211> 174 <212>Amino acid <213> Homo sapiens

<400> 809 Lys Gly Val Pro Thr Leu Leu Met Ala Ala Gly Ser Phe Tyr Asp Ile 1 5 Leu Ala Ile Thr Gly Phe Asn Thr Cys Leu Gly Ile Ala Phe Ser Thr 20 25 Gly Ser Thr Val Phe Asn Val Leu Arg Gly Val Leu Glu Val Val Ile 35 40 Gly Val Ala Thr Gly Ser Val Leu Gly Phe Phe Ile Gln Tyr Phe Pro 55 Ser Arg Asp Gln Asp Lys Leu Val Cys Lys Arg Thr Phe Leu Val Leu 70 75 80 Gly Leu Ser Val Leu Ala Val Phe Ser Ser Val His Phe Gly Phe Pro 85 90 Gly Ser Gly Gly Leu Cys Thr Leu Val Met Ala Phe Leu Ala Gly Met 105 Gly Trp Thr Ser Glu Lys Ala Glu Val Glu Lys Ile Ile Ala Val Ala 120 Trp Asp Ile Phe Gln Pro Leu Leu Phe Gly Leu Ile Gly Ala Glu Val 130 135 Ser Ile Ser Ser Leu Arg Pro Glu Thr Val Gly Leu Cys Val Ala Thr 145 150 155 Val Gly Ile Ala Val Leu Ile Arg Ile Phe Asp Tyr Ile Phe 165 170

<210> 810 · <211> 104 <212>Amino acid <213> Homo sapiens

<210> 811 <211> 77 <212>Amino acid <213> Homo sapiens

<210> 812 <211> 194 <212>Amino acid <213> Homo sapiens

<400> 812 Leu Glu Ser Leu Pro Gly Phe Lys Glu Ile Val Ser Arg Gly Val Lys 5 10 Val Asp Tyr Leu Thr Pro Asp Phe Pro Ser Leu Ser Tyr Pro Asn Tyr 20 Tyr Thr Leu Met Thr Gly Arg His Cys Glu Val His Gln Met Ile Gly 40 Asn Tyr Met Trp Asp Pro Thr Thr Asn Lys Ser Phe Asp Ile Gly Val 55 Asn Lys Asp Ser Leu Met Pro Leu Trp Trp Asn Gly Ser Glu Pro Leu 70 75 Trp Val Thr Leu Thr Lys Ala Lys Arg Lys Val Tyr Met Tyr Tyr Trp 85 90 Pro Gly Cys Glu Val Glu Ile Leu Gly Val Arg Pro Thr Tyr Cys Leu 105 Glu Tyr Lys Asn Val Pro Thr Asp Ile Asn Phe Ala Asn Ala Val Ser 120 125 Asp Ala Leu Asp Ser Phe Lys Ser Gly Arg Ala Asp Leu Ala Ala Ile 135 140 Tyr His Glu Arg Ile Asp Val Glu Gly His His Tyr Gly Pro Ala Ser 150 155 Pro Gln Arg Lys Asp Ala Leu Lys Ala Val Asp Thr Val Leu Lys Tyr 165 170 Met Thr Lys Trp Ile Gln Glu Arg Gly Leu Gln Asp Arg Leu Asn Val

180 185 190

Ile Ile 194

> <210> 813 <211> 116

<212>Amino acid

<213> Homo sapiens

<220> .

<221> misc_feature

<222> (1)...(116)

<223> X = any amino acid or stop code

<400> 813

Ala Arg Asp Phe His Pro Lys Gln Thr Leu Asp Phe Leu Arg Ser Asp 1 5 10 15

Met Ala Asn Ser Lys Ile Thr Glu Glu Val Lys Arg Ser Ile Ala Gln 20 25 30

Gln Tyr Leu Asp Leu Thr Val Ala Leu Glu Gln Val Asp Pro Asp Ala 35 40 45

Glu Val Asp Ala Ala Pro Ser Thr Thr Ser Ser Cys Gly His Xaa Asp
50 55 60

Ser His Ala Gly Ser Xaa Arg Val Leu Ser Leu Leu Gly Asp Xaa Gly 65 70 75 80

Pro Ala Xaa Thr Gly Ala Asn Ser Met Ala Gly Lys Leu Leu Val

Ala Trp Leu Gly Phe Pro Asp Pro Phe Trp Gly Lys Glu Leu Ser Asp

Pro Ala Phe Lys

115 116

<210> 814

<211> 121

<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (121)

<223> X = any amino acid or stop code

<400> 814

Lys Gln Ser Gly Asp Val Thr Cys Asn Cys Thr Asp Gly Arg Leu Ala 1 5 10

Pro Ser Cys Leu Thr Cys Val Gly His Cys Ile Phe Gly Gly Tyr Cys
20 25 30

Thr Met Asn Ser Lys Met Met Pro Glu Cys Gln Ser Pro Pro His Met
35 40 45

Thr Gly Pro Arg Cys Glu Glu His Val Phe Ser Gln His Gln Pro Gly
50 55 60

His Ile Thr Ser Ile Leu Ile Pro Met Leu Xaa Leu Leu Leu Val 65 70 75 80

Leu Val Ala Gly Val Ile Phe Cys His Lys Arg Arg Val Gln Gly Ala

| Solid Region | Soli

<210> 815
<211> 86
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(86)
<223> X = any amino acid or stop code

<212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(130) <223> X = any amino acid or stop code

<210> 816 <211> 130

100 105 110

Lys Ala Gly Lys Leu Gly Lys Cys Gln Glu Val Leu Phe Arg Phe Ala 115 120 125

Ala Phe 130

<210> 817
<211> 119
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(119)
<223> X = any amino acid or stop code

Phe Arg Ala Met Phe Leu Ala Val Gln His Asp Cys Arg Pro Met Asp 10 Lys Ser Ala Gly Ser Gly His Lys Ser Glu Glu Lys Arg Glu Lys Met 25 Lys Arg Thr Leu Leu Lys Asp Trp Lys Thr Arg Leu Ser Tyr Phe Leu 40 Gln Asn Ser Ser Thr Pro Gly Lys Pro Lys Thr Gly Lys Lys Ser Lys 55 60 Gln Gln Ala Phe Ile Lys Xaa Val Glu Asn Pro Glu Leu Ala Asn Ile 70 Asn Ser Xaa Leu Leu Asn Xaa Lys Gly Glu Leu Xaa Xaa Ala Xaa Ala 85 90 Asn Ile Gln Asn Leu Ser Cys Arg Pro Ser Pro Glu Glu Ala Gln Leu 100 105 Trp Ser Glu Ala Phe Asp Glu 115

<210> 818
<211> 131
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(131)
<223> X = any amino acid or stop code

<210> 819
<211> 85
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(85)
<223> X = any amino acid or stop code

<211> 44
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(44)
<223> X = any amino acid or stop code

<210> 821

<210> 820

<211> 105 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(105) <223> X = any amino acid or stop code

 400> 821

 Asn Ser Ser Lys Lys Lys Leu Val Met Glu His Gln Trp Lys Lys Tyr Leu

 1
 5
 10
 15

 Arg Arg Asn Tyr Gln Arg Met Leu Asn Arg Leu Ile Thr Leu Ile Gly
 20
 25
 30

 Ser Cys Gly Val Leu Xaa Leu Ile Ser Thr Ile Pro Thr Ser Arg Leu
 45
 Leu

 Lys Phe Leu Lys Glu Thr Gly His Gly Thr Pro Met Glu Glu Glu Ile Pro
 50
 60

 Glu Glu Glu Leu Ser Glu Asp Val Glu Gln Ile Asp His Ala Asp Arg
 75
 80

 Glu Leu Arg Arg Gly Gln Asn Leu Arg Cys Lys Gly Ile His Arg Leu
 90
 95

Pro Thr His Ile Gln Val Gly Gln Asn 100 105

<211> 172
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (172)
<223> X = any amino acid or stop code

<210> 822

<400> 822 Lys Trp Met Leu Leu His Ser Phe Lys Ile Phe Cys Leu Ser Leu Tyr 5 10 Pro Gln Leu Xaa Cys Pro Phe Glu Phe Phe Ser His Ser Ala Thr Ile 25 Phe His Glu Leu Val Tyr Lys Gln Thr Lys Ile Ile Ser Ser Asn Gln Glu Leu Ile Tyr Glu Gly Arg Arg Leu Val Leu Glu Pro Gly Arg Leu Ala Gln His Phe Pro Lys Thr Thr Glu Glu Asn Pro Ile Phe Val Val 70 Ser Arg Glu Pro Leu Asn Thr Ile Gly Leu Ile Tyr Glu Lys Ile Ser Leu Pro Lys Val His Pro Arg Tyr Asp Leu Asp Gly Asp Ala Ser Met 100 105 Ala Lys Ala Ile Thr Gly Val Val Cys Tyr Ala Cys Arg Ile Ala Ser 120 Thr Leu Leu Tyr Gln Glu Leu Met Arg Lys Gly Ile Arg Trp Leu 135 Ile Glu Leu Ile Lys Asp Asp Tyr Asn Glu Thr Val His Lys Lys Thr

145 150 155 160
Glu Val Val Ile Thr Leu Gly Phe Leu Val Ser Arg
165 170 172

<210> 823
<211> 104
<212>Amino acid
<213> Homo sapiens
<220> .
<221> misc_feature
<222> (1) ... (104)

<223> X = any amino acid or stop code

<400> 823 Gly Thr Arg Lys Met Gly Pro Thr Val Ser Pro Ile Cys Leu Pro Gly 10 Thr Trp Gly Asp Tyr Asn Leu Met Asp Gly Asp Leu Gly Leu Ile Ser 20 25 Gly Trp Gly Arg Thr Glu Lys Arg Asp Arg Ala Asp Arg Leu Lys Ala 40 Gly Arg Ser Pro Ala Ala Gly Xaa Arg Lys Trp Glu Pro Gly Arg Gly 55 Asp Pro Thr Trp Glu Glu Ser Glu Glu Asp Val His Lys Ser Lys Trp 70 75 Thr Arg Cys Val Asp Glu Lys Gly Ala Xaa Cys Xaa Thr Asp Asn Lys 85 90 Arg Pro Leu Arg Cys Gly Val Thr 100

<210> 824 <211> 99 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1) ... (99) <223> X = any amino acid or stop code

99

<210> 825
<211> 111
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(111)
<223> X = any amino acid or stop code

<400> 825 Pro Val Pro Leu Pro His Pro Ile Leu Glu Val Cys Pro Gly Gln Xaa 10 Glu Pro Gln Ser Ala Ile Ser Leu Thr Ala Phe Gln Val Gln Ala Gly 20 25 Ala Ser Arg Ala Ser Pro Gly Pro Pro Ala Pro Ser Ser Ser Lys Pro 40 Gly Arg Lys Ala Lys Val Ala Ser Pro Cys Pro Asp Arg Pro Ala Pro 55 60 Pro Pro Thr Xaa Pro Arg Pro Ala Ala Ala Pro Gly Ser Glu Ser Ser 70 75 Pro Arg Pro Pro Arg Pro Arg Thr Gly Arg Arg Gln Gln Arg Ala His 85 90 Ala Arg Arg Ala Ala Ala Arg Thr Ala Pro Trp Arg Pro Ser Cys

<210> 826 <211> 95 <212>Amino acid <213> Homo sapiens

<210> 827 <211> 33 <212>Amino acid <213> Homo sapiens

<220>

<221> misc_feature <222> (1)...(33) <223> X = any amino acid or stop code

<210> 828
<211> 178
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(178)
<223> X = any amino acid or stop code

<400> 828 Ile Asn Leu Gly Asn Thr Cys Tyr Met Asn Ser Val Ile Xaa Ala Leu 10 Phe Met Ala Thr Asp Phe Arg Arg Gln Val Leu Ser Leu Asn Leu Asn 25 30 Gly Cys Asn Ser Leu Met Lys Lys Leu Gln His Leu Phe Ala Phe Leu Ala His Thr Gln Arg Glu Ala Tyr Ala Pro Arg Ile Phe Phe Glu Ala 55 60 Ser Arg Pro Pro Trp Phe Thr Pro Arg Ser Gln Gln Asp Cys Ser Glu 70 Tyr Leu Arg Phe Leu Leu Asp Arg Leu His Glu Glu Glu Lys Ile Leu 85 90 Lys Val Gln Ala Ser His Lys Pro Ser Glu Ile Leu Glu Cys Ser Glu 100 105 Thr Ser Leu Gln Glu Val Ala Ser Lys Ala Ala Val Leu Thr Glu Thr 120 Pro Arg Thr Ser Asp Gly Glu Lys Thr Leu Ile Glu Lys Met Phe Gly 135 140 Gly Lys Leu Arg Thr His Ile Arg Cys Leu Asn Cys Thr Ser Thr Ser 150 155 Gln Lys Val Glu Ala Phe Thr Asp Leu Ser Leu Ala Phe Trp Pro Ser 165 170 Ser Ser

<210> 829 <211> 43 <212>Amino acid <213> Homo sapiens

<220>

<221> misc_feature <222> (1)...(43) <223> X = any amino acid or stop code

<400> 829

<210> 830 <211> 259 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1) ... (259)

<223> X = any amino acid or stop code

<400> 830 Met His Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu 5 10 Asp Met Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr 20 25 Glu Ser Cys Thr Asp Ser Gly Ala Glu Asn Glu Gly Ser Cys His Ser 40 Asp Gln Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly 55 60 Ile Cys Leu Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Leu Glu Lys Asn Ser Leu Ile Tyr Glu Leu Phe Ser Val Met Val His 90 Ser Gly Ser Ala Ala Gly Gly His Tyr Tyr Ala Cys Ile Lys Ser Phe 105 Ser Asp Glu Gln Trp Tyr Ser Phe Asn Asp Gln His Val Ser Arg Ile 120 Thr Gln Glu Asp Ile Lys Lys Thr His Gly Gly Ser Ser Gly Ser Arg 135 Gly Tyr Tyr Ser Ser Ala Phe Ala Ser Ser Thr Asn Ala Tyr Met Leu 150 155 Ile Tyr Arg Leu Lys Asp Pro Ala Arg Asn Ala Lys Phe Leu Glu Val 165 170 Asp Glu Tyr Pro Glu His Ile Lys Asn Leu Val Gln Lys Glu Arg Glu 185 190 Leu Glu Glu Glu Lys Arg Gln Arg Glu Ile Glu Arg Asn Thr Cys 200 205 Lys Ile Lys Leu Phe Cys Leu His Pro Thr Lys Gln Val Met Met Glu 215 220 Asp Xaa Ile Glu Val His Lys Asp Lys Thr Leu Lys Glu Ala Val Glu 230 235 Met Ala Tyr Lys Met Met Asp Leu Glu Glu Val Ile Pro Leu Asp Cys 250

Cys Arg Leu 259

> <210> 831 <211> 200 <212>Amino acid <213> Homo sapiens

<400> 831 Ser Val Met Pro Val Pro Ala Leu Cys Leu Leu Trp Ala Leu Ala Met 5 10 Val Thr Arg Pro Ala Ser Ala Ala Pro Met Gly Gly Pro Glu Leu Ala 20 25 Gln His Glu Glu Leu Thr Leu Leu Phe His Gly Thr Leu Gln Leu Gly 35 40 Gln Ala Leu Asn Gly Val Tyr Arg Thr Thr Glu Gly Arg Leu Thr Lys 55 60 Ala Arg Asn Ser Leu Gly Leu Tyr Gly Arg Thr Ile Glu Leu Leu Gly 75 Gln Glu Val Ser Arg Gly Arg Asp Ala Ala Gln Glu Leu Arg Ala Ser 90 Leu Leu Glu Thr Gln Met Glu Glu Asp Ile Leu Gln Leu Gln Ala Glu 100 105 Ala Thr Ala Glu Val Leu Gly Glu Val Ala Gln Ala Gln Lys Val Leu 120 Arg Asp Ser Val Gln Arg Leu Glu Val Gln Leu Arg Ser Ala Trp Leu 135 140 Gly Pro Ala Tyr Arg Glu Phe Glu Val Leu Lys Ala His Ala Asp Lys 150 155 Gln Ser His Ile Leu Trp Ala Leu Thr Gly His Val Gln Arg Gln Arg 165 170 · 175 Arg Glu Met Val Ala Gln Gln His Arg Leu Arg Gln Ile Gln Glu Arg 185 Leu His Thr Ala Ala Leu Pro Ala

<210> 832 <211> 225 <212>Amino acid <213> Homo sapiens

Ile Ala Glu Val Val Cys Arg Gln Leu Glu Cys Gly Ser Ala Ile Arg 105 Val Ser Arg Glu Pro His Phe Thr Glu Arg Thr Leu His Ile Leu Met 120 125 Ser Asn Ser Gly Cys Ala Gly Gly Glu Ala Ser Leu Trp Asp Cys Ile 135 140 Arg Trp Glu Trp Lys Gln Thr Ala Cys His Leu Asn Met Glu Ala Ser 150 155 Leu Ile Cys Ser Ala His Arg Gln Pro Arg Leu Val Gly Ala Asp Met 170 Pro Cys Ser Gly Arg Val Glu Val Lys His Ala His Thr Trp Arg Ser 185 Val Cys Asp Ser Asp Phe Ser Leu His Ala Ala Asn Val Leu Cys Arg 205 195 200 Glu Leu Asn Cys Gly Asp Ala Ile Ser Leu Ser Val Gly Asp His Phe 215 Gly 225

<210> 833 <211> 206 <212>Amino acid <213> Homo sapiens

<400> 833 Ser Asn Tyr Pro Ser Ser Arg Phe Arg Val Ala Gly Ile Thr Gly Val Lys Leu Gly Met Arg Ser Ile Pro Ile Ala Thr Ala Cys Thr Ile Tyr His Lys Phe Phe Cys Glu Thr Asn Leu Asp Ala Tyr Asp Pro Tyr Leu 40 Ile Ala Met Ser Ser Ile Tyr Leu Ala Gly Lys Val Glu Glu Gln His 55 Leu Arg Thr Arg Asp Ile Ile Asn Val Ser Asn Arg Tyr Phe Asn Pro 70 75 Ser Gly Glu Pro Leu Glu Leu Asp Ser Arg Phe Trp Glu Leu Arg Asp 85 90 Ser Ile Val Gln Cys Glu Leu Leu Met Leu Arg Val Leu Arg Phe Gln 105 Val Ser Phe Gln His Pro His Lys Tyr Leu Leu His Tyr Leu Val Ser 120 125 Leu Gln Asn Trp Leu Asn Arg His Ser Trp Gln Arg Thr Pro Val Ala 135 140 Val Thr Ala Trp Ala Leu Leu Arg Asp Ser Tyr His Gly Ala Leu Cys 155 Leu Arg Phe Gln Ala Gln His Ile Ala Val Ala Val Leu Tyr Leu Ala 170 Leu Gln Val Tyr Gly Val Glu Val Pro Ala Glu Val Glu Ala Asp Glu 185 Ala Val Gly Trp Gln Ile Tyr Ala Met Asp Thr Glu Ile Pro 200 .

<210> 834 <211> 86 <212>Amino acid <213> Homo sapiens

<211> 110 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(110) <223> X = any amino acid or stop code

<210> 835

<211> 70
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(70)
<223> X = any amino acid or stop code

<400> 836

<210> 836

Gly Lys Gln Gln Arg Glu Thr Leu Arg Arg Pro Ser Pro Thr Ile Ser 1 5 10 15

Val Gln Arg Ala Gly Ser Pro Glu His Ser Ser Ala Ser His Xaa His 20 25 30

Ser Pro Cys Pro Ala Pro Gly Gln Arg Val Leu Pro Thr Ala Leu Cys 35 40 45

Thr Leu Met Thr Ser Lys His Phe His Gly Cys Pro Leu Ala Gly Gln 50 55 60

Gly Arg Ala Val Thr Leu 70

<210> 837 <211> 473 <212>Amino acid <213> Homo sapiens

<400> 837 Gly Val Cys Gly Leu Pro Arg Phe Cys Gly Ser Ile Ile Leu Cys His Tyr Glu Met Ser Ser Leu Gly Ala Ser Phe Val Gln Ile Lys Phe Asp Asp Leu Gln Phe Phe Glu Asn Cys Gly Gly Gly Ser Phe Gly Ser Val 40 Tyr Arg Ala Lys Trp Ile Ser Gln Asp Lys Glu Val Ala Val Lys Lys 55 Leu Leu Lys Ile Glu Lys Glu Ala Glu Ile Leu Ser Val Leu Ser His 70 75 Arg Asn Ile Ile Gln Phe Tyr Gly Val Ile Leu Glu Pro Pro Asn Tyr 90 85 Gly Ile Val Thr Glu Tyr Ala Ser Leu Gly Ser Leu Tyr Asp Tyr Ile 105 Asn Ser Asn Arg Ser Glu Glu Met Asp Met Asp His Ile Met Thr Trp 120 Ala Thr Asp Val Ala Lys Gly Met His Tyr Leu His Met Glu Ala Pro 135 140 Val Lys Val Ile His Arg Asp Leu Lys Ser Arg Asn Val Val Ile Ala 155 Ala Asp Gly Val Leu Lys Ile Cys Asp Phe Gly Ala Ser Arg Phe His 170 Asn His Thr Thr His Met Ser Leu Val Gly Thr Phe Pro Trp Met Ala 185 Pro Glu Val Ile Gln Ser Leu Pro Val Ser Glu Thr Cys Asp Thr Tyr 200 Ser Tyr Gly Val Val Leu Trp Glu Met Leu Thr Arg Glu Val Pro Phe 215 220 Lys Gly Leu Glu Gly Leu Gln Val Ala Trp Leu Val Val Glu Lys Asn 230 235 Glu Arg Leu Thr Ile Pro Ser Ser Cys Pro Arg Ser Phe Ala Glu Leu 245 250 Leu His Gln Cys Trp Glu Ala Asp Ala Lys Lys Arg Pro Ser Phe Lys 265 270 Gln Ile Ile Ser Ile Leu Glu Ser Met Ser Asn Asp Thr Ser Leu Pro 280 Asp Lys Cys Asn Ser Phe Leu His Asn Lys Ala Glu Trp Arg Cys Glu 295 300 Ile Glu Ala Thr Leu Glu Arg Leu Lys Lys Leu Glu Arg Asp Leu Ser 310 315 Phe Lys Glu Gln Glu Leu Lys Glu Arg Glu Arg Arg Leu Lys Met Trp 330

Glu Gln Lys Leu Thr Glu Gln Ser Asn Thr Pro Leu Leu Pro Leu 345 Ala Ala Arg Met Ser Glu Glu Ser Tyr Phe Glu Ser Lys Thr Glu Glu 355 360 Ser Asn Ser Ala Glu Met Ser Cys Gln Ile Thr Ala Thr Ser Asn Gly 375 Glu Gly His Gly Met Asn Pro Ser Leu Gln Ala Met Met Leu Met Gly 390 395 Phe Gly Asp Ile Phe Ser Met Asn Lys Ala Gly Ala Val Met His Ser 405 410 Gly Met Gln.Ile Asn Met Gln Ala Lys Gln Asn Ser Ser Lys Thr Thr 420 425 Ser Lys Arg Arg Gly Lys Lys Val Asn Met Ala Leu Gly Phe Ser Asp 440 435 445 Phe Asp Leu Ser Glu Gly Asp Asp Asp Asp Asp Asp Gly Glu Glu 455 460 Glu Tyr Asn Asp Met Asp Asn Ser Glu 470 473

<210> 838 <211> 48 <212>Amino acid <213> Homo sapiens

<210> 839

<211> 116
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (116)
<223> X = any amino acid or stop code

Ser Leu Asn Asn Val Thr Leu Pro Gln Ala Lys Thr Glu Lys Asp Phe 10 Ile Gln Leu Cys Thr Pro Gly Val Ile Lys Gln Glu Lys Leu Gly Thr 25 Val Tyr Cys Gln Ala Ser Ser Pro Gly Ala Asn Met Ile Gly Asn Lys 40 Met Ser Ala Ile Ser Val His Gly Val Ser Thr Ser Gly Gly Gln Met 55 60 Tyr His Tyr Asp Met Asn Thr Ala Ser Leu Ser Gln Gln Xaa Asp Gln 70 Lys Pro Ile Phe Asn Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn 85 90 Trp Asn Arg Cys Gln Gly Ser Gly Asp Asp Asn Leu Thr Ser Leu Gly 100 105 110 Thr Leu Asn Phe Pro Gly Arg Thr Val Ser Phe Ser Phe Glu Met Glu 120 Ser Arg Ser Val Ala Gln Ala Gly Val Gln 130 135

<210> 841 <211> 82 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(82) <223> X = any amino acid or stop code

<211> 230
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(230)
<223> X = any amino acid or stop code

<210> 843

<400> 843 Ala Thr Tyr Ile Val Asp Phe Gly Phe Ser Thr Thr Phe Arg Glu Gly 10 Gln Met Leu Thr Ala Phe Cys Gly Met Tyr Pro Tyr Val Ala Pro Glu 25 Arg Ser Leu Gly Gln Ala Cys Gln Xaa Pro Ala Arg Asp Ile Gln Ser 40 Leu Ser Val Ile Leu Tyr Phe Arg Asn Thr Val Gly Arg Arg Ala Arg 55 Thr Leu Pro Phe Tyr Ser Ala Glu Ala Ser Lys Leu Gln Glu Lys Ile Leu Thr Gly Arg Tyr His Ala Pro Pro Leu Leu Ala Leu Gln Leu Asp 90 Ser Leu Ile Lys Leu Leu Met Leu Asn Ala Arg Lys Cys Pro Ser Leu 105 110 Xaa Leu Met Lys Asn Pro Trp Val Lys Ser Ser Gln Lys Met Pro Leu 120 125 Ile Pro Tyr Glu Glu Pro Leu Arg Gly Pro Pro Gln Thr Ile Gln Leu

| Met | Val | Ala | Met | Gly | Phe | Gln | Ala | Lys | Asn | Ile | Ser | Val | Ala | Ile | Ile | Ide | Ide

<210> 844 <211> 258 <212>Amino acid <213> Homo sapiens <220> <221> misc feature

<222> (1)...(258)

<223> X = any amino acid or stop code

<400> 844 Ala Lys Gln Glu Leu Ala Lys Leu Met Arg Ile Glu Asp Pro Ser Leu 10 Leu Asn Ser Arg Val Leu Leu His His Ala Lys Ala Gly Thr Ile Ile 25 Ala Arg Gln Gly Asp Gln Asp Val Ser Leu His Phe Val Leu Trp Gly 40 Cys Leu His Val Tyr Gln Arg Met Ile Asp Lys Ala Glu Asp Val Cys Leu Phe Val Ala Gln Pro Gly Glu Leu Val Gly Gln Leu Ala Val Leu 70 75 Thr Gly Glu Pro Leu Ile Phe Thr Leu Arg Ala Gln Arg Asp Cys Thr 85 90 Phe Leu Arg Ile Ser Lys Ser Asp Phe Tyr Glu Ile Met Arg Ala Gln 105 Pro Ser Val Val Leu Ser Ala Ala His Thr Val Ala Ala Arg Met Ser 120 125 Pro Phe Val Arg Gln Met Asp Phe Ala Ile Asp Trp Thr Ala Val Glu 135 140 Ala Gly Arg Ala Leu Tyr Arg Cys Ser Ser His Arg Ala Ala Gln Ala 150 155 Arg Pro Arg Gly Gly Asp Leu Gly Val Val Arg Pro Cys Xaa Pro Pro 170 Arg Pro Leu Arg Gln Gly Asp Arg Ser Asp Cys Thr Tyr Ile Val Leu 185 Asn Gly Arg Leu Arg Ser Val Ile Gln Arg Gly Ser Gly Lys Lys Glu 200 205 Leu Val Gly Glu Tyr Gly Arg Gly Asp Leu Ile Gly Val Val Ser Ala 215 220 Thr Pro Thr His Xaa Pro Leu Ala Phe Ser Arg Pro Val Pro Arg Gln . 230 235 Leu Thr Arg Ile Ile Pro Gly Asn Pro Gly Ser Gly Glu Val Phe Pro Gly Ala 258

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<210> 845

<211> 235

<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(235)

<223> X = any amino acid or stop code
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<400> 845 His Ala Ser Gly Trp Thr Pro Gly Thr Thr Gln Thr Leu Gly Gln Gly 10 Thr Ala Trp Asp Thr Val Ala Ser Thr Pro Gly Thr Ser Glu Thr Thr 25 Ala Ser Ala Glu Gly Arg Arg Thr Pro Gly Ala Thr Arg Pro Ala Ala 40 Pro Gly Thr Gly Ser Trp Ala Glu Gly Ser Val Lys Ala Pro Ala Pro Ile Pro Glu Ser Pro Pro Ser Lys Ser Arg Ser Met Ser Asn Thr Thr Glu Gly Val Trp Glu Gly Thr Arg Ser Ser Val Thr Asn Arg Ala Arg Ala Ser Lys Asp Arg Arg Glu Met Thr Thr Thr Lys Ala Asp Arg Pro 100 105 Arg Glu Asp Ile Glu Gly Val Arg Ile Ala Leu Asp Ala Ala Lys Lys 120 Val Leu Gly Thr Ile Gly Pro Pro Ala Leu Val Ser Glu Thr Leu Ala 135 140 Trp Glu Ile Leu Pro Gln Ala Thr Pro Val Ser Lys Gln Gln Ser Gln 150 155 Gly Ser Ile Gly Glu Thr Thr Pro Ala Ala Gly Met Trp Thr Leu Gly 165 170 Thr Pro Ala Ala Asp Val Trp Ile Leu Gly Thr Pro Ala Ala Asp Val 185 Trp Thr Ser Met Glu Ala Ala Ser Gly Glu Gly Ser Ala Ala Gly Asp 200 Leu Asp Ala Ala Thr Gly Asp Arg Gly Pro Gln Ala Thr Leu Ser Gln 215 220 Thr Pro Ala Val Xaa Pro Trp Gly Pro Pro Gly 230

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<210> 846
<211> 134
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) . . . (134)
<223> X = any amino acid or stop code
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<400> 846

Ala Gly Thr Ser Gly Thr Gly Asp Thr Gly Pro Gly Asn Thr Ala Val 10 Ser Gly Thr Pro Val Val Ser Pro Gly Ala Thr Pro Gly Ala Pro Gly 25 Ser Ser Thr Pro Gly Glu Ala Asp Ile Gly Asn Thr Ser Phe Gly Lys 40 Ser Gly Thr Pro Thr Val Ser Ala Ala Ser Thr Thr Ser Ser Pro Val 55 Ser Lys His Thr Asp Ala Ala Ser Ala Thr Ala Val Thr Ile Ser Gly 70 75 Ser Lys Pro Gly Thr Pro Gly Thr Pro Gly Gly Ala Thr Ser Gly Gly 85 90 Lys Ile Thr Pro Gly Ile Ala Xaa Pro Thr Leu Asp Gln Lys Ser Pro 100 105 Cys Phe Ser Gly Tyr Gly Gly Tyr Phe Pro Val Asn Pro His Gln Asn 115 120 Pro Cys Ala Asp Ser Leu 130

<210> 847 <211> 188 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(188)

<223> X = any amino acid or stop code

<400> 847 Arg Ala His Arg Cys Cys Leu Pro Leu Pro Ser Leu Ser Cys Glu Ile 10 Gln Ile Gly Phe Ser Xaa Ser Ser Ile Phe Pro Gly Gln Xaa Ala Cys Pro Cys Ser Cys Cys Arg Ser Cys Arg Arg Asn Trp Pro Gln Ser Pro 40 Arg Cys Pro His His Pro Pro Ala Pro Cys Ser Leu Leu Leu Ser Ser Cys Leu Pro Pro Pro Leu Ser Cys Ser Trp Arg Gly Thr Ser Gly Lys 70 Pro Pro Ser Gln Ser Pro Ala Ala Ser Arg Ser Met Arg Pro Arg Cys 90 85 Ser Pro Arg Thr Ser Ser Leu Arg Gly Ala Ser Cys Arg Gly Pro Gly 105 Gly Ser Ala Pro Ala Ala Ala Ser Gly Pro Arg Cys Arg Gly Cys Ser 125 115 120 Arg Ser Pro Arg Arg Cys Ser Arg Ser Gly Cys Ala Ala Ala Ser Pro 135 140 Pro Arg Ser Gln Arg Arg Ser Pro Pro Leu Ser Pro Pro Pro Phe Pro 150 155 Thr Ser Gly Thr Leu Leu Leu Lys Thr Ser Arg Phe Gly Ser Ala Thr 170 Arg Glu Xaa Ser Ser Pro Arg Pro Arg Pro Arg Pro

<210> 848 <211> 328 <212>Amino acid

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> X = any amino acid or stop code

<400> 848 Asp Asp Val Pro Pro Pro Ala Pro Asp Leu Tyr Asp Val Pro Pro Gly 10 Leu Arg Arg Pro Gly Pro Gly Thr Leu Tyr Asp Val Pro Arg Glu Arg 25 Val Leu Pro Pro Glu Val Ala Asp Gly Gly Val Val Asp Ser Gly Val 40 Tyr Ala Val Pro Pro Pro Ala Glu Arg Glu Ala Pro Ala Glu Gly Lys Arg Leu Ser Ala Ser Ser Thr Gly Ser Thr Arg Ser Ser Gln Ser Ala 70 Ser Ser Leu Glu Val Ala Gly Pro Gly Arg Glu Pro Leu Glu Leu Glu 90 Val Ala Val Glu Ala Leu Ala Arg Leu Gln Gln Gly Val Ser Ala Thr 100 105 Val Ala His Leu Leu Asp Leu Ala Gly Ser Ala Gly Ala Thr Gly Ser 120 Trp Arg Ser Pro Ser Glu Pro Gln Glu Pro Leu Val Gln Asp Leu Gln 135 140 Ala Ala Val Ala Ala Val Gln Ser Ala Val His Glu Leu Leu Glu Phe 150 155 Ala Arg Ser Ala Val Gly Asn Ala Ala His Thr Ser Asp Arg Ala Leu 165 170 His Ala Lys Leu Ser Arg Gln Leu Gln Lys Met Glu Asp Val His Gln 185 Thr Leu Val Ala His Gly Gln Ala Leu Asp Ala Gly Arg Gly Gly Ser 200 Gly Ala Thr Leu Glu Asp Leu Asp Arg Leu Val Ala Cys Ser Arg Ala 215 Val Pro Glu Asp Ala Lys Gln Leu Ala Ser Phe Leu His Gly Asn Ala 230 235 Ser Leu Leu Phe Arg Arg Thr Lys Ala Thr Ala Pro Gly Pro Glu Gly 245 250 Gly Gly Thr Leu His Pro Asn Pro Thr Asp Lys Thr Ser Ser Ile Gln 265 Ser Arg Pro Leu Pro Ser Pro Pro Lys Phe Thr Ser Gln Asp Ser Pro 280 Asp Gly Gln Tyr Glu Asn Ser Glu Gly Gly Trp Met Glu Asp Tyr Asp 295 300 Tyr Val His Leu Thr Gly Gly Arg Arg Ser Phe Xaa Lys Thr Gln Lys 310 315 Glu Leu Leu Gly Lys Arg Ala Ala 325

<210> 849
<211> 98
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc feature

<222> (1)...(98)

<223> X = any amino acid or stop code

<400> 849 Met Ala Thr Asp Glu Glu Asn Val Tyr Gly Leu Glu Glu Asn Ala Gln 10 Ser Arg Gln Glu Ser Thr Arg Arg Leu Ile Leu Val Gly Arg Thr Gly Ala Gly Lys Ser Ala Thr Gly Asn Ser Ile Leu Gly Gln Arg Arg Phe 40 Phe Ser Arg Leu Gly Ala Thr Ser Val Thr Arg Ala Cys Thr Thr Gly 55 Ser Arg Arg Trp Asp Lys Cys His Val Glu Val Val Asp Thr Pro Asp 70 Ile Phe Ser Ser Gln Val Ser Lys Thr Asp Pro Gly Cys Glu Glu Arg 90 Xaa * 97 <210> 850 <211> 94

<212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1) ... (94) <223> X = any amino acid or stop code

<211> 50
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (50)
<223> X = any amino acid or stop code

<210>. 851

<210> 852 <211> 143 <212>Amino acid <213> Homo sapiens

<400> 852 Arg Arg Ser Pro Pro Pro Ala Pro Pro Pro Leu Pro Ser Pro Leu Ser 5 10 Pro Pro Pro Arg Ala Pro Val Ser Pro Ala Ser Thr Met Pro Ile Leu 25 Leu Phe Leu Ile Asp Thr Ser Ala Ser Met Asn Gln Arg Ser His Leu 40 Gly Thr Thr Tyr Leu Asp Thr Ala Lys Gly Ala Val Glu Thr Phe Met 55 60 Lys Leu Arg Ala Arg Asp Pro Ala Ser Arg Gly Asp Arg Tyr Met Leu 70 75 Val Thr Phe Glu Glu Pro Pro Tyr Ala Ile Lys Ala Gly Trp Lys Glu 85 90 Asn His Ala Thr Phe Met Asn Glu Leu Lys Asn Leu Gln Ala Glu Gly 100 105 110 Leu Thr Thr Leu Gly Gln Ser Leu Arg Thr Ala Phe Asp Leu Leu Asn 120 125 Leu Asn Arg Leu Val Thr Gly Ile Asp Asn Tyr Gly Gln Val Gly 135

<210> 853 <211> 154 <212>Amino acid <213> Homo sapiens

 Cys
 Trp
 Arg
 Val
 Gly
 Phe
 Leu
 Gly
 Pro
 Gly
 Gly
 Glu
 Leu
 Arg
 Leu
 Gly

 Leu
 Ser
 Glu
 Ala
 Arg
 Gly
 Gly
 Arg
 Val
 Trp
 Gly
 Arg
 Gly
 Arg
 Arg
 Instant
 Inst

<210> 854
<211> 90
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(90)
<223> X = any amino acid or stop code

<400> 854 Val Thr Pro Thr Pro Pro Gln Tyr Tyr Thr Cys Ser Cys Val Leu Gly 5 10 Phe Ile Ala Cys Ser Ile Phe Leu Gln Met Ser Leu Lys Pro Lys Val 20 25 30 Met Leu Leu Thr Val Ala Leu Val Ala Cys Leu Val Leu Phe Asn Leu 40 Ser Gln Cys Trp Gln Arg Asp Cys Cys Ser Gln Gly Leu Gly Asn Leu 55 Thr Glu Pro Ser Gly Thr Asn Arg Xaa Gly Pro Ala Ala Val Ser Trp 70 Ala Ser Leu Pro Ala Pro Ser Ser Cys Arg 85

<211> 61
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(61)
<223> X = any amino acid or stop code

<210> 855

<210> 856 <211> 779 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1) ... (779) <223> X = any amino acid or stop code

<400> 856

Pro Lys Arg Leu Phe Leu Phe Gln Asp Val Asn Thr Leu Gln Gly Gly 10 Gly Gln Pro Val Val Thr Pro Ser Val Gln Pro Ser Leu Gln Pro Ala 25 His Pro Ala Leu Pro Gln Met Thr Ser Gln Ala Pro Gln Pro Ser Val 40 Thr Gly Leu Gln Ala Pro Ser Ala Ala Leu Met Gln Val Ser Ser Leu 55 Asp Ser His Ser Ala Val Ser Gly Asn Ala Gln Ser Phe Gln Pro Tyr 70 75 Ala Gly Met Gln Ala Tyr Ala Tyr Pro Gln Ala Ser Ala Val Thr Ser 85 90 Gln Leu Gln Pro Val Arg Pro Leu Tyr Pro Ala Pro Leu Ser Gln Pro 105 Pro His Phe Gln Gly Ser Gly Asp Met Ala Ser Phe Leu Met Thr Glu 120 Ala Arg Gln His Asn Thr Glu Ile Arg Met Ala Val Ser Lys Val Ala 135 140 Asp Lys Met Asp His Leu Met Thr Lys Val Glu Glu Leu Gln Lys His 150 155 Ser Ala Gly Asn Ser Met Leu Ile Pro Ser Met Ser Val Thr Met Glu 165 170 Thr Ser Met Ile Met Ser Asn Ile Gln Arg Ile Ile Gln Glu Asn Glu 180 185 Arg Leu Lys Gln Glu Ile Leu Glu Lys Ser Asn Arg Ile Glu Glu Gln 195 200 205 Asn Asp Lys Ile Ser Glu Leu Ile Glu Arg Asn Gln Arg Tyr Val Glu 215 220 Gln Ser Asn Leu Met Met Glu Lys Arg Asn Asn Ser Leu Gln Thr Ala 235 Thr Glu Asn Thr Gln Ala Arg Val Leu His Ala Glu Gln Glu Lys Ala 245 250 Lys Val Thr Glu Glu Leu Ala Ala Ala Thr Ala Gln Val Ser His Leu 260 265 Gln Leu Lys Met Thr Ala His Gln Lys Lys Glu Thr Glu Leu Gln Met 280 Gln Leu Thr Glu Ser Leu Lys Glu Thr Asp Leu Leu Arg Gly Gln Leu 295 300 Thr Lys Val Gln Ala Lys Leu Ser Glu Leu Gln Glu Thr Ser Glu Gln 310 315 Ala Gln Ser Lys Phe Lys Ser Glu Lys Gln Asn Arg Lys Gln Leu Glu 330 Leu Lys Val Thr Ser Leu Glu Glu Glu Leu Thr Asp Leu Arg Val Glu 345 Lys Glu Ser Leu Glu Lys Asn Leu Ser Glu Arg Lys Lys Ser Ala 360 365 Gln Glu Arg Ser Gln Ala Glu Glu Glu Ile Asp Glu Ile Arg Lys Ser 370 375

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Tyr Gln Glu Glu Leu Asp Lys Leu Arg Gln Leu Leu Lys Lys Thr Arg
                  390
                                    395
Val Ser Thr Asp Gln Ala Ala Ala Glu Gln Leu Ser Leu Val Gln Ala
              405
                                410
Glu Leu Gln Thr Gln Trp Glu Ala Lys Cys Glu His Leu Leu Ala Ser
          420
                            425
Ala Lys Asp Glu His Leu Gln Gln Tyr Gln Glu Val Cys Ala Gln Arg
               440
Asp Ala Tyr Gln Gln Lys Leu Val Gln Leu Gln Glu Lys Ser Val Cys
           455
                                     460
Phe Ala Cys Leu Ala Leu Gln Ala Gln Ile Thr Ala Leu Thr Lys Gln
                 470
                                   475
Asn Glu Gln His Ile Lys Glu Leu Glu Lys Asn Lys Ser Gln Met Ser
             485
                               490
Gly Val Glu Ala Ala Ala Ser Asp Pro Ser Glu Lys Val Lys Lys Ile
                            505
Met Asn Gln Val Phe Gln Ser Leu Arg Arg Glu Phe Glu Leu Glu Glu
                        520
Ser Tyr Asn Gly Arg Thr Ile Leu Gly Thr Ile Met Asn Thr Ile Lys
                    535
                                       540
Met Val Thr Leu Gln Leu Leu Asn Gln Gln Glu Gln Glu Lys Glu Glu
                 550
                                   555
Ser Ser Ser Glu Glu Glu Glu Lys Ala Glu Glu Arg Pro Arg Arg
             565
                                570
Pro Ser Gln Glu Gln Ser Ala Ser Ala Ser Ser Gly Gln Pro Gln Ala
                            585
Pro Leu Asn Arg Glu Arg Pro Glu Ser Pro Met Val Pro Ser Glu Gln
                        600
Val Val Glu Glu Ala Val Pro Leu Pro Pro Gln Ala Leu Thr Thr Ser
                     615
                                       620
Gln Asp Gly His Arg Arg Lys Gly Asp Ser Glu Ala Glu Ala Leu Ser
                630 635 640
Glu Ile Lys Asp Gly Ser Leu Pro Pro Glu Leu Ser Cys Ile Pro Ser
             645 650
His Arg Val Leu Gly Pro Pro Thr Ser Ile Pro Pro Glu Pro Leu Gly
                           665
Pro Val Ser Met Asp Ser Glu Cys Glu Glu Ser Leu Ala Ala Ser Pro
                         680
Met Ala Ala Lys Pro Asp Asn Pro Ser Gly Lys Val Cys Val Gln Gly
                     695
                                        700
Lys Xaa Ala Pro Asp Gly Pro Thr Tyr Lys Glu Ser Ser Thr Arg Leu
                  710
Phe Pro Gly Phe Gln Asp Pro Glu Glu Gly Asp Pro Leu Ala Leu Gly
                                730
Leu Glu Ser Pro Gly Glu Pro Gln Pro Pro Gln Leu Gln Gly Lys Val
                             745
Asp Val His Xaa Val Pro Pro Val Pro His Lys Gly Ala Phe Gln Glu
                         760
Gln Glu Gly Arg Phe Pro Gln Phe Cys Arg Glu
                     775
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<210> 857
<211> 510
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(510)
<223> X = any amino acid or stop code
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<400> 857 Ser Glu Thr Ala Gln Gln Ile Ile Asp Arg Leu Arg Val Lys Leu Ala 10 Lys Glu Pro Gly Ala Asn Leu Phe Leu Met Ala Val Gln Asp Ile Arg 20 25 Val Gly Gly Arg Gln Ser Asn Ala Ser Tyr Gln Tyr Thr Leu Leu Ser 35 40 Asp Asp Leu Ala Ala Leu Arg Glu Trp Glu Pro Lys Ile Arg Lys Lys 55 Leu Ala Thr Leu Pro Glu Leu Ala Asp Val Asn Ser Asp Gln Gln Asp 70 75 Asn Gly Ala Glu Met Asn Leu Val Tyr Asp Arg Asp Thr Met Ala Arg 85 90 Leu Gly Ile Asp Val Gln Ala Ala Asn Ser Leu Leu Asn Asn Ala Phe 100 105 Gly Gln Arg Gln Ile Ser Thr Ile Tyr Gln Pro Met Asn Gln Tyr Lys 120 125 Val Val Met Glu Val Asp Pro Arg Tyr Thr Gln Asp Ile Ser Ala Leu 135 140 Glu Lys Met Phe Val Ile Asn Asn Glu Gly Lys Ala Ile Pro Leu Ser 150 155 Tyr Phe Ala Lys Trp Gln Pro Ala Asn Ala Pro Leu Ser Val Asn His 165 170 Gln Gly Leu Ser Ala Ala Leu Thr Ile Ser Phe Asn Leu Pro Thr Gly 180 185 190 Lys Ser Leu Ser Asp Ala Ser Ala Ala Ile Asp Arg Ala Met Ser Gln 200 Leu Gly Val Pro Ser Thr Val Arg Gly Ser Phe Ala Gly Pro Ala Gln 220 215 Val Phe Gln Glu Thr Met Asn Ser Gln Val Ile Leu Ile Ile Ala Ala 230 235 Ile Ala Thr Val Tyr Ile Val Leu Gly Ile Pro Tyr Glu Arg Tyr Val 245 250 . His Pro Pro Thr Ile Leu Leu Xaa Arg Pro Gly Ala Asn Leu Phe Leu 260 265 Met Ala Val Gln Asp Ile Arg Val Gly Gly Arg Gln Ser Asn Ala Ser 280 285 Tyr Gln Tyr Thr Leu Leu Ser Asp Asp Leu Ala Ala Leu Arg Glu Trp 295 300 Glu Pro Lys Ile Arg Lys Leu Ala Thr Leu Pro Glu Leu Ala Asp 310 315 Val Asn Ser Asp Gln Gln Asp Asn Gly Ala Glu Met Asn Leu Val Tyr 330 Asp Arg Asp Thr Met Ala Arg Leu Gly Ile Asp Val Gln Ala Ala Asn 340 345 Ser Leu Leu Asn Asn Ala Phe Gly Gln Arg Gln Ile Ser Thr Ile Tyr 360 Gln Pro Met Asn Gln Tyr Lys Val Val Met Glu Val Asp Pro Arg Tyr 375 Thr Gln Asp Ile Ser Ala Leu Glu Lys Met Phe Val Ile Asn Asn Glu 390 395 Gly Lys Ala Ile Pro Leu Ser Tyr Phe Ala Lys Trp Gln Pro Ala Asn 405 410 Ala Pro Leu Ser Val Asn His Gln Gly Leu Ser Ala Ala Leu Thr Ile 425 430 Ser Phe Asn Leu Pro Thr Gly Lys Ser Leu Ser Asp Ala Ser Ala Ala 440 445 Ile Asp Arg Ala Met Ser Gln Leu Gly Val Pro Ser Thr Val Arg Gly 455 460 Ser Phe Ala Gly Pro Ala Gln Val Phe Gln Glu Thr Met Asn Ser Gln 470 475 Val Ile Leu Ile Ile Ala Ala Ile Ala Thr Val Tyr Ile Val Leu Gly

485 490 495

Ile Pro Tyr Glu Arg Tyr Val His Pro Pro Thr Ile Leu Leu
500 505 510

<210> 858
<211> 137
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(137)
<223> X = any amino acid or stop code

<400> 858 Ile Ile Thr Pro Asp Ala Met Gly Cys Gln Lys Asp Ile Ala Glu Lys 10 Ile Gln Lys Gln Gly Gly Asp Tyr Leu Phe Ala Val Lys Gly Asn Gln 25 Gly Arg Leu Asn Lys Ala Phe Glu Glu Lys Phe Pro Leu Lys Glu Leu 40 Asn Asn Pro Glu His Asp Ser Tyr Ala Ile Ser Glu Lys Ser His Gly 55 60 Arg Glu Glu Ile Arg Leu His Ile Val Cys Asp Val Pro Asp Glu Leu 70 75 Ile Asp Phe Thr Phe Glu Trp Lys Gly Leu Lys Lys Leu Cys Val Ala 85 Val Ser Phe Arg Ser Ile Ile Ala Glu Gln Lys Lys Glu Pro Glu Met 105 Thr Val Arg Tyr Asn Ile Ser Xaa Leu Gly Ile Ala Gly Asp Ile Ser 115 120 Val Thr Ala Ile Ser Gly Thr Asp Asp 135 137

<211> 123
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(123)
<223> X = any amino acid or stop code

<210> 859

<210> 860
<211> 190
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(190)
<223> X = any amino acid or stop code

<400> 860 Cys Trp Ser Lys Ser Ala Ala Phe His Ser Lys Leu Ala Thr Thr Cys 10 Ile Val Pro Val Cys Ala Ala Gly His Cys Ser Ala Ala Trp Xaa Ser 20 Leu Arg Pro Ile Glu Ala Leu Ala Lys Glu Val Arg Glu Leu Lys Xaa His Thr Arg Xaa Leu Leu Asn Pro Ala Thr Thr Arg Glu Leu Thr Ser 55 Leu Gly Arg Asn Leu Asn Arg Leu Leu Lys Ser Glu Arg Glu Arg Tyr 70 75 Asp Lys Tyr Arg Thr Thr Leu Thr Asp Leu Thr His Ser Leu Lys Thr 85 90 Pro Leu Ala Val Leu Gln Ser Thr Leu Arg Ser Leu Arg Ser Glu Lys 105 Met Ser Val Ser Asp Ala Glu Pro Val Met Leu Glu Gln Ile Ser Arg 120 125 Ile Ser Gln Gln Ile Gly Tyr Tyr Leu His Arg Ala Ser Met Arg Gly 135 140 Gly Thr Leu Leu Ser Arg Glu Leu His Pro Val Ala Pro Leu Leu Asp 150 155 Asn Leu Thr Ser Ala Leu Ile Lys Gly Lys Pro Arg Lys Gly Gly Asn 165 170 Val Thr Val Phe Pro Phe Thr Ala Met Tyr Arg Asp Gly His 185

<210> 861 <211> 241 <212>Amino acid <213> Homo sapiens

Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Glu Leu Ile Ile Thr 40 Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln Thr Pro Val Lys Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg Pro Tyr Phe Cys 70 Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys Phe Thr Met Cys 90 Cys Ile Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn Arg Thr Ser Pro 105 100 Arg Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln Glu Ala Tyr Met 120 Thr Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu Val Thr Val Ile 135 140 Gly Ala Ile Ile Ile Leu Leu Val Glu Val Pro Asp Ile Phe Arg Met 150 155 Gly Val Thr Arg Phe Phe Gly Gln Thr Ile Leu Gly Gly Pro Phe His 165 170 Val Leu Ile Ile Thr Tyr Ala Phe Met Val Leu Val Thr Met Val Met 185 Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met Ser Phe Ala Leu 200 Val Leu Gly Trp Cys Asn Val Met Tyr Phe Ala Arg Gly Phe Gln Met 215 Leu Gly Pro Phe Thr Ile Met Ile Gln Lys Met Ile Phe Gly Asp Leu 230 Met 241

<210> 862 <211> 45 <212>Amino acid <213> Homo sapiens

<210> 863 <211> 120 <212>Amino acid <213> Homo sapiens

<210> 864
<211> 124
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (124)
<223> X = any amino acid or stop code

<400> 864 Arg Pro Ala Pro Ala Pro Ser Ala Ala Pro Glu Glu Ala Pro Ser Pro 10 Gly Val Lys Gly Arg Gly Met Ala Lys Arg Arg Val Pro Ala Pro Val Trp Gly Gly Ala Gly Gly Thr Lys Ser Ala Arg Arg Ala Ala Ala 40 Ala Pro Asp Thr Glu Arg Ser Glu Glu Gly Gly Arg Ala Val Lys Glu Ala Tyr Pro Ser Ser Arg Gln Pro Pro Pro Pro Ser Pro Xaa Pro Leu 70 75 Arg Cys Ala Arg Arg Cys His Pro Asn Leu Ala Pro Ser Met Pro Ile 85 Ser Asn Arg Glu Gly Lys Gly Lys Arg Arg Glu Glu Lys Ile Arg Pro 105 Leu Ser Pro Ala Ser Thr His Thr Ser Ala Arg Ala 120

<210> 865 <211> 120 <212>Amino acid <213> Homo sapiens

65 70 75 80

Arg Lys Pro Gly Pro Glu Thr Gly Val Pro Gln Ser Arg Pro Pro Ile

85 90 95

Pro Arg Thr Gln Pro Gln Pro Glu Pro Pro Ser Pro Asp Gln Gln Val

100 105 110

Thr Arg Ser Asn Ser Ala Ala Pro
115 120

<210> 866 <211> 82 <212>Amino acid <213> Homo sapiens

<400> 866 Met Ala Asp Pro Asp Pro Arg Tyr Pro Arg Ser Ser Ile Glu Asp Asp 10 Phe Asn Tyr Gly Ser Ser Glu Ala Ser Asp Thr Val His Ile Arg Met 20 25 Ala Phe Leu Arg Arg Val Tyr Ser Ile Leu Ser Leu Gln Asp Leu Leu 40 45 Ala Thr Val Thr Ser Thr Asp Asn Leu Ala Phe Glu Asp Gly Arg Thr 55 60 Asp Trp Leu Gln Arg Pro Asp Cys Val Ser Phe Lys Ile His Val Leu 65 75 Pro Met 82

<210> 867 <211> 60 <212>Amino acid <213> Homo sapiens

<210> 868 <211> 78 <212>Amino acid <213> Homo sapiens

 $<\!\!400\!\!> 868$ Val Ala Ala Leu Thr Leu Phe Pro Gln Gln Leu Ser Pro Pro Gly

<210> 869 <211> 119 <212>Amino acid <213> Homo sapiens

<400> 869 Arg Asp Asp Ala Cys Leu Tyr Ser Pro Ala Ser Ala Pro Glu Val Ile 10 Thr Val Gly Ala Thr Asn Ala Gln Asp Gln Pro Val Thr Leu Gly Thr 25 Leu Gly Thr Asn Phe Gly Arg Cys Val Asp Leu Phe Ala Pro Gly Glu 40 Asp Ile Ile Gly Ala Ser Ser Asp Cys Ser Thr Cys Phe Val Ser Gln 55 60 Ser Gly Thr Ser Gln Ala Ala Ala His Val Ala Gly Ile Ala Ala Met 70 75 Met Leu Ser Ala Glu Pro Glu Leu Thr Leu Ala Glu Leu Arg Gln Arg 85 90 Leu Ile His Phe Ser Ala Lys Asp Val Ile Asn Glu Ala Trp Phe Pro 100 105 Glu Asp Gln Arg Val Leu Thr 115 119

<210> 870 <211> 34 <212>Amino acid <213> Homo sapiens

<210> 871 <211> 154 <212>Amino acid <213> Homo sapiens

<400> 871 Glu Ala Gly Asp Ala Asp Glu Asp Glu Ala Asp Ala Asn Ser Ser Asp 10 Cys Glu Pro Glu Gly Pro Val Glu Ala Glu Glu Pro Pro Gln Glu Asp Ser Ser Ser Gln Ser Asp Ser Val Glu Asp Arg Ser Glu Asp Glu Glu 40 Asp Glu His Ser Glu Glu Glu Glu Thr Ser Gly Ser Ser Ala Ser Glu Glu Ser Glu Ser Glu Glu Ser Glu Asp Ala Gln Ser Gln Ser Gln Ala Asp Glu Glu Glu Asp Asp Asp Phe Gly Val Glu Tyr Leu Leu Ala 90 Arg Asp Glu Glu Gln Ser Glu Ala Asp Ala Gly Ser Gly Pro Pro Thr 105 Pro Gly Pro Thr Thr Leu Gly Pro Lys Lys Glu Ile Thr Asp Ile Ala 120 125 Ala Ala Ala Glu Ser Leu Gln Pro Lys Gly Tyr Thr Leu Ala Thr Thr 135 Gln Val Lys Thr Pro Ile Pro Leu Leu Leu 150

<210> 872 <211> 118 <212>Amino acid <213> Homo sapiens

`<400> 872 Leu Lys Asn Leu Arg Glu Leu Leu Leu Glu Asp Asn Gln Leu Pro Gln 10 Ile Pro Ser Gly Leu Pro Glu Ser Leu Thr Glu Leu Ser Leu Ile Gln 20 25 Thr Asn Ile Tyr Asn Ile Thr Lys Glu Gly Ile Ser Arg Leu Ile Asn 40 45 Leu Lys Asn Leu Tyr Leu Ala Trp Asn Cys Tyr Phe Asn Lys Val Cys Glu Lys Thr Asn Ile Glu Asp Gly Val Phe Glu Thr Leu Thr Asn Leu 70 75 Glu Leu Leu Ser Leu Ser Phe Asn Ser Leu Ser His Val Pro Pro Lys 85 90 Leu Pro Ser Ser Leu Arg Lys Leu Phe Leu Ser Asn Thr Gln Ile Lys 105 Tyr Ile Ser Glu Glu Asp 115 118

<210> 873 <211> 42 <212>Amino acid <213> Homo sapiens

<400> 873
Met Arg Ser Gln Ala Leu Gly Gln Ser Ala Pro Ser Leu Thr Ala Ser

1 5 10 15

Leu Lys Glu Leu Ser Leu Pro Arg Arg Gly Ser Phe Pro Val Cys Pro
20 25 30

Asn Ala Gly Arg Thr Ser Pro Leu Gly *
35 40 41

<210> 874 <211> 70 <212>Amino acid <213> Homo sapiens

<210> 875 <211> 41 <212>Amino acid <213> Homo sapiens

<210> 876 <211> 139 <212>Amino acid <213> Homo sapiens

<211> 350 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(350) <223> X = any amino acid or stop code

<210> 877

<400> 877 Pro Ser Pro Leu Pro Ser Leu Ser Leu Pro Pro Pro Val Ala Pro Gly 5 10 Gly Gln Glu Ser Pro Ser Pro His Thr Ala Glu Val Glu Ser Glu Ala 20 25 Ser Pro Pro Pro Ala Arg Pro Leu Pro Gly Glu Ala Arg Leu Ala Pro 40 Ile Ser Glu Glu Gly Lys Pro Gln Leu Val Gly Arg Phe Gln Val Thr 55 60 Ser Ser Lys Asn Arg Leu Ser Leu Phe Pro Cys Ser Gln His Pro Pro 70 75 Leu Ser Leu Val Leu Gln Asn Leu Gln Pro Leu Ser Ser Leu Gln Arg 90 Ala Gln Ile Gln Arg Thr Val Pro Gly Gly Pro Glu Thr Arg Glu 105 Ala Leu Ala Glu Ser Asp Arg Ala Ala Glu Gly Leu Gly Ala Gly Val 120 125 Glu Glu Glu Gly Asp Asp Gly Lys Glu Pro Gln Val Gly Gly Ser Pro 135 Gln Pro Leu Ser His Pro Ser Pro Val Trp Met Asn Tyr Ser Tyr Ser 150 155 Ser Leu Cys Leu Ser Ser Glu Glu Ser Glu Ser Ser Gly Glu Asp Glu 165 170 Glu Phe Trp Ala Glu Leu Gln Ser Leu Arg Gln Lys His Leu Ser Glu 185 Val Glu Thr Leu Gln Thr Leu Gln Lys Lys Glu Ile Glu Asp Leu Tyr 200 Ser Arg Leu Gly Lys Gln Pro Pro Pro Gly Ile Val Ala Pro Ala Ala 215 220 Met Leu Ser Ser Arg Gln Arg Arg Leu Ser Lys Gly Ser Phe Pro Thr 230 235 Ser Arg Arg Asn Ser Leu Gln Arg Ser Glu Pro Pro Gly Pro Gly Glu 245 250 Thr Ala Gly His Pro Ala Ser Ile Phe Ser Leu Arg Pro Leu Ser Val 265 Asp Cys Phe Ser Pro Gly Pro Gly Gly Leu Pro Arg Gly Asn Arg Pro 280

 Pro
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 Thr
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<210> 878 <211> 112 <212>Amino acid <213> Homo sapiens

<400> 878 Arg Arg Phe Val Ser Gln Glu Thr Gly Asn Leu Tyr Ile Ala Lys Val Glu Lys Ser Asp Val Gly Asn Tyr Thr Cys Val Val Thr Asn Thr Val 20 25 Thr Asn His Lys Val Leu Gly Pro Pro Thr Pro Leu Ile Leu Arg Asn 40 Asp Gly Val Met Gly Glu Tyr Glu Pro Lys Ile Glu Val Gln Phe Pro 55 Glu Thr Val Pro Thr Ala Lys Gly Ala Thr Val Lys Leu Glu Cys Phe 70 75 Ala Leu Gly Asn Pro Val Pro Thr Ile Ile Trp Arg Arg Ala Asp Gly 90 Lys Pro Ile Ala Arg Lys Ala Arg Arg His Lys Ser Arg Val Gly Lys 105

<210> 879 <211> 282 <212>Amino acid <213> Homo sapiens

<400> 879 Met Leu Arg Thr Cys Tyr Val Leu Cys Ser Gln Ala Gly Pro Arg Ser 10 Arg Gly Trp Gln Ser Leu Ser Phe Asp Gly Gly Ala Phe His Leu Lys 20 25 Gly Thr Gly Glu Leu Thr Arg Ala Leu Leu Val Leu Arg Leu Cys Ala 35 Trp Pro Pro Leu Val Thr His Gly Leu Leu Leu Gln Ala Trp Ser Arg 55 Arg Leu Leu Gly Ser Arg Leu Ser Gly Ala Phe Leu Arg Ala Ser Val 70 Tyr Gly Gln Phe Val Ala Gly Glu Thr Ala Glu Glu Val Lys Gly Cys 85 Val Gln Gln Leu Arg Thr Leu Ser Leu Arg Pro Leu Leu Ala Val Pro 105 Thr Glu Glu Glu Pro Asp Ser Ala Ala Lys Ser Gly Glu Ala Trp Tyr 115 120

Glu Gly Asn Leu Gly Ala Met Leu Arg Cys Val Asp Leu Ser Arg Gly 135 Leu Leu Glu Pro Pro Ser Leu Ala Glu Ala Ser Leu Met Gln Leu Lys 150 155 Val Thr Ala Leu Thr Ser Thr Arg Leu Cys Lys Glu Leu Ala Ser Trp 165 170 Val Arg Arg Pro Gly Ala Ser Leu Glu Leu Ser Pro Glu Arg Leu Ala 185 Glu Ala Met Asp Ser Gly Gln Asn Leu Gln Val Ser Cys Leu Asn Ala 200 Glu Gln Asn Gln His Leu Arg Ala Ser Leu Ser Arg Leu His Arg Val 215 220 Ala Gln Tyr Ala Arg Ala Gln His Val Arg Leu Leu Val Asp Ala Glu 230 235 Tyr Thr Ser Leu Asn Pro Ala Leu Ser Leu Leu Val Ala Ala Leu Ala 245 250 Val Arg Trp Asn Ser Pro Gly Glu Gly Gly Pro Trp Val Trp Asn Thr 265 Tyr Gln Ala Cys Leu Lys Asp Thr Phe * 280 281

<210> 880 <211> 29 <212>Amino acid <213> Homo sapiens

<210> 881 <211> 45 <212>Amino acid <213> Homo sapiens

<210> 882 <211> 54 <212>Amino acid <213> Homo sapiens

<210> 883 <211> 479 <212>Amino acid <213> Homo sapiens

<400> 883 Lys Leu Ser Val Asn His Arg Arg Thr His Leu Thr Lys Leu Met His 1.0 Thr Val Glu Gln Ala Thr Leu Arg Ile Ser Gln Ser Phe Gln Lys Thr 25 Thr Glu Phe Asp Thr Asn Ser Thr Asp Ile Ala Leu Lys Val Phe Phe 40 Phe Asp Ser Tyr Asn Met Lys His Ile His Pro His Met Asn Met Asp Gly Asp Tyr Ile Asn Ile Phe Pro Lys Arg Lys Ala Ala Tyr Asp Ser 70 75 Asn Gly Asn Val Ala Val Ala Phe Leu Tyr Tyr Lys Ser Ile Gly Pro 85 90 Leu Leu Ser Ser Ser Asp Asn Phe Leu Leu Lys Pro Gln Asn Tyr Asp 105 110 Asn Ser Glu Glu Glu Glu Arg Val Ile Ser Ser Val Ile Ser Val Ser 120 125 Met Ser Ser Asn Pro Pro Thr Leu Tyr Glu Leu Glu Lys Ile Thr Phe 135 140 Thr Leu Ser His Arg Lys Val Thr Asp Arg Tyr Arg Ser Leu Cys Ala 150 155 Phe Trp Asn Tyr Ser Pro Asp Thr Met Asn Gly Ser Trp Ser Ser Glu 170 Gly Cys Glu Leu Thr Tyr Ser Asn Glu Thr His Thr Ser Cys Arg Cys 180 185 Asn His Leu Thr His Phe Ala Ile Leu Met Ser Ser Gly Pro Ser Ile 200 205 Gly Ile Lys Asp Tyr Asn Ile Leu Thr Arg Ile Thr Gln Leu Gly Ile 215 220 Ile Ile Ser Leu Ile Cys Leu Ala Ile Cys Ile Phe Thr Phe Trp Phe 230 235 Phe Ser Glu Ile Gln Ser Thr Arg Thr Thr Ile His Lys Asn Leu Cys 245 250 Cys Ser Leu Phe Leu Ala Glu Leu Val Phe Leu Val Gly Ile Asn Thr 265 Asn Thr Asn Lys Leu Phe Cys Ser Ile Ile Ala Gly Leu Leu His Tyr 280 Phe Phe Leu Ala Ala Phe Ala Trp Met Cys Ile Glu Gly Ile His Leu 295 300 Tyr Leu Ile Val Val Gly Val Ile Tyr Asn Lys Gly Phe Leu His Lys 315 310 Asn Phe Tyr Ile Phe Gly Tyr Leu Ser Pro Ala Val Val Gly Phe

Ser Ala Ala Leu Gly Tyr Arg Tyr Tyr Gly Thr Thr Lys Val Cys Trp 345 Leu Ser Thr Glu Asn Asn Phe Ile Trp Ser Phe Ile Gly Pro Ala Cys 355 360 Leu Ile Ile Leu Val Asn Leu Leu Ala Phe Gly Val Ile Ile Tyr Lys 375 Val Phe Arg His Thr Ala Gly Leu Lys Pro Glu Val Ser Cys Phe Glu 390 395 Asn Ile Arg Ser Cys Ala Arg Gly Ala Leu Ala Leu Leu Phe Leu Leu 405 410 Gly Thr Thr Trp Ile Phe Gly Val Leu His Val Val His Ala Ser Val 420 425 Val Thr Ala Tyr Leu Phe Thr Val Ser Asn Ala Phe Gln Gly Met Phe 440 Ile Phe Leu Phe Leu Cys Val Leu Ser Arg Lys Ile Gln Glu Glu Tyr 455 460 Tyr Arg Leu Phe Lys Asn Val Pro Cys Cys Phe Gly Cys Leu Arg 470

<210> 884 <211> 143 <212>Amino acid <213> Homo sapiens

<400> 884 Gly Thr Arg Glu Ala Ala Pro Ser Arg Phe Met Phe Leu Leu Phe Leu 10 Leu Thr Cys Glu Leu Ala Ala Glu Val Ala Glu Val Glu Lys Ser 20 25 Ser Asp Gly Pro Gly Ala Ala Gln Glu Pro Thr Trp Leu Thr Asp Val 40 Pro Ala Ala Met Glu Phe Ile Ala Ala Thr Glu Val Ala Val Ile Gly , 55 60 Phe Phe Gln Asp Leu Glu Ile Pro Ala Val Pro Ile Leu His Ser Met 75 Val Gln Lys Phe Pro Gly Val Ser Phe Gly Ile Ser Thr Asp Ser Glu 90 Val Leu Thr His Tyr Asn Ile Thr Gly Asn Thr Ile Cys Leu Phe Arg 100 105 Leu Val Asp Asn Glu Gln Leu Asn Leu Glu Asp Glu Asp Ile Glu Ser 120 · Ile Asp Ala Thr Lys Leu Ser Arg Phe Ile Glu Ile Asn Ser Leu 130 135 140

<210> 885 <211> 52 <212>Amino acid <213> Homo sapiens

Cys Val Ala Trp Ser Ser Ala Gly Thr Thr Lys Ser Arg Lys Ala Tyr \$35\$ \$40\$ \$45\$ Val Arg Ile Ala \$50\$ \$52\$

<210> 886 <211> 40 <212>Amino acid <213> Homo sapiens

<210> 887
<211> 177
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (177)
<223> X = any amino acid or stop code

<400> 887 Xaa Cys Gly Glu Asp Gly Ser Phe Thr Gln Val Gln Cys His Thr Tyr 10 Thr Gly Tyr Cys Trp Cys Val Thr Pro Asp Gly Lys Pro Ile Ser Gly 20 Ser Ser Val Gln Asn Lys Thr Pro Val Cys Ser Gly Ser Val Thr Asp 40 Lys Pro Leu Ser Gln Gly Asn Ser Gly Arg Lys Asp Asp Gly Ser Lys 55 Pro Thr Pro Thr Met Glu Thr Gln Pro Val Phe Asp Gly Asp Glu Ile 70 75 Thr Ala Pro Thr Leu Trp Ile Lys His Leu Val Ile Lys Asp Ser Lys 85 90 Leu Asn Asn Thr Asn Ile Arg Asn Ser Glu Lys Val Tyr Ser Cys Asp 100 105 110 Gln Glu Arg Gln Ser Ala Leu Glu Glu Ala Gln Gln Asn Pro Arg Glu 115 120 125 Gly Ile Val Ile Pro Glu Cys Ala Pro Gly Gly Leu Tyr Lys Pro Val 135 140 Gln Cys His Gln Ser Thr Gly Tyr Cys Trp Cys Val Leu Val Asp Thr 150 155 Gly Arg Pro Leu Pro Gly Thr Ser Thr Arg Tyr Val Met Pro Ser Xaa 170

<210> 888 <211> 48 <212>Amino acid <213> Homo sapiens

<210> 889 <211> 316 <212>Amino acid <213> Homo sapiens

<400> 889 Arg Arg Leu Ser Leu Leu Asp Leu Gln Leu Gly Pro Leu Gly Arg Asp 1 5 . 15 10 Pro Pro Gln Glu Cys Ser Thr Phe Ser Pro Thr Asp Ser Gly Glu Glu 20 Pro Gly Gln Leu Ser Pro Gly Val Gln Phe Gln Arg Arg Gln Asn Gln 35 40 45 Arg Arg Phe Ser Met Glu Asp Val Ser Lys Arg Leu Ser Leu Pro Met 50 55 Asp Ile Arg Leu Pro Gln Glu Phe Leu Gln Lys Leu Gln Met Glu Ser 75 70 Pro Asp Leu Pro Lys Pro Leu Ser Arg Met Ser Arg Arg Ala Ser Leu 85 90 Ser Asp Ile Gly Phe Gly Lys Leu Glu Thr Tyr Val Lys Leu Asp Lys 105 Leu Gly Glu Gly Thr Tyr Ala Thr Val Phe Lys Gly Arg Ser Lys Leu 120 125 Thr Glu Asn Leu Val Ala Leu Lys Glu Ile Arg Leu Glu His Glu Glu 135 Gly Ala Pro Cys Thr Ala Ile Arg Glu Val Ser Leu Leu Lys Asn Leu 150 155 Lys His Ala Asn Ile Val Thr Leu His Asp Leu Ile His Thr Asp Arg 170 Ser Leu Thr Leu Val Phe Glu Tyr Leu Asp Ser Asp Leu Lys Gln Tyr 185 Leu Asp His Cys Gly Asn Leu Met Ser Met His Asn Val Lys Val Arg 195 200 Pro Arg Gly Gln Gly Pro Pro Ile Leu Ala Ala Thr Cys Pro Glu Ala 215 220 Gln Cys Gly Asp Pro Leu Ser Pro Pro Gly Ile Arg Leu Leu Arg Trp 230 235 Leu Lys Pro Ser His Val Gly Lys Arg Glu Arg Ala Met Pro Ser Thr 245 250 Ser Pro Gly Thr Gly Leu Ser Ala Leu Pro Gln Glu Gln Thr His Thr

Val Cys His Cys Leu Ala Val Gly Ile Lys Pro Thr Leu Asn Ser Glu 275

His Gln Phe Pro Ser Leu Ser Asn Gly Ser Val Ser Tyr Leu Pro Lys 290

Cys Arg Glu Ala Ser Gly Glu Ala Arg Gly Tyr Glu 315

<210> 890 <211> 34 <212>Amino acid <213> Homo sapiens

<210> 891 <211> 68 <212>Amino acid <213> Homo sapiens

<210> 892 <211> 38 <212>Amino acid <213> Homo sapiens

35 38

<210> 893 <211> 195 <212>Amino acid <213> Homo sapiens

<400> 893 His Thr His Lys Leu Val Ala Pro Arg Pro Gly Leu Pro Pro Thr Ser 10 Gln Trp Pro Arg Asp Ala Gly Arg Gln Ala Ser Gly Gly Leu Pro Ser 20 Leu Ser Thr Gly Pro Pro Lys Gly Pro Arg Asp Gly Leu Ala Arg Gly 40 His Pro Ala Glu Trp Leu Ala Gly Ser Pro Gly Asn Asn Ser Pro Thr 50 55 Gln Gly Ser Leu Pro Pro Gln Leu Asp Leu Tyr Ala Gly Ala Leu Phe 70 75 Val His Ile Cys Leu Gly Trp Asn Phe Tyr Leu Ser Thr Ile Leu Thr 90 Leu Gly Ile Thr Ala Leu Tyr Thr Ile Ala Gly Met Val Pro Ala Ala 105 Gly Arg Ser Thr Gln Gly Thr Cys Lys Gly Val Arg Arg Pro Pro Pro 115 120 125 Pro Thr Gly Pro Arg Glu Gln Pro Arg Lys Trp Pro Gln Gln Glu Pro 135 140 Gln Lys Phe Leu Pro Val Ser Leu Leu Pro Gly Ala Arg Ala Pro Ser 145 150 Ser Asn Leu Ala Ser Thr Gly Arg Gly Pro Gly Cys Cys Asn Leu His 170 Gly Arg Pro Ala Asp Ala His His Gly Gly Gly Cys His Pro Asp 185 Asn Gln Arg 195

<210> 894 <211> 87 <212>Amino acid <213> Homo sapiens

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<210> 895
<211> 49
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(49)
<223> X = any amino acid or stop code
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<210> 896
<211> 128
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(128)
<223> X = any amino acid or stop code

<400> 896 Met Arg Gly Pro Pro Val Leu Leu Gln Ala Ala Pro Met Glu Cys 10 5 Pro Val Pro Gln Gly Ile Pro Ala Gly Ser Ser Pro Glu Pro Ala Pro 20 25 Asp Pro Pro Gly Pro His Phe Leu Arg Gln Glu Arg Ser Phe Glu Cys 40 Arg Met Cys Gly Lys Ala Phe Lys Arg Ser Ser Thr Leu Ser Thr His 55 60 Leu Leu Ile His Ser Asp Thr Arg Pro Tyr Pro Cys Gln Phe Cys Gly 70 75 Lys Arg Phe His Gln Lys Ser Asp Met Lys Lys His Thr Tyr Ile His 90 Thr Gly Glu Lys Pro His Lys Cys Gln Thr Gln Arg Glu Pro Thr Met 105 Val Leu Ser Pro Ala Asp Lys Thr Asn Val Lys Ala Ala Trp Xaa *

<210> 897 <211> 57 <212>Amino acid <213> Homo sapiens

<400> 897 His Glu Gln Leu Thr Asn Asn Thr Ala Thr Ala Pro Ser Ala Thr Pro 1 5· 10 Val Phe Gly Gln Val Ala Ala Ser Thr Ala Pro Ser Leu Phe Gly Gln 25 Gln Thr Gly Ile Thr Ala Ser Thr Ala Val Ala Thr Pro Gln Val Ile 35 40 Ser Ser Arg Phe Ile Asn Leu Asp Phe 55 57 <210> 898 <211> 163 <212>Amino acid <213> Homo sapiens <220> <221> misc feature <222> (1) ... (163) <223> X = any amino acid or stop code

<400> 898 Val Ser Val Phe Lys Asn Cys Pro Met Tyr Xaa Ile Cys Ile Phe Leu 5 10 Thr Lys Met Phe Cys Val Leu Ile Ile Xaa Asn Lys Phe Xaa Val His 25 Lys Lys Pro Leu Gln Glu Val Glu Ile Ala Ala Ile Thr His Gly Ala 40 45 Leu Gln Gly Leu Ala Tyr Leu His Ser His Thr Met Ile His Arg Asp 55 60 Ile Lys Ala Gly Asn Ile Leu Leu Thr Glu Pro Gly Gln Val Lys Leu 75 80 70 Ala Asp Phe Gly Ser Ala Ser Met Ala Ser Pro Ala Asn Ser Phe Val 90 Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ile Leu Ala Met Asp Glu 105 Gly Gln Tyr Asp Gly Lys Val Asp Val Trp Ser Leu Gly Ile Thr Cys 120 Ile Glu Leu Ala Glu Arg Lys Pro Pro Leu Phe Asn Met Asn Ala Met 140 135 Ser Ala Leu Tyr His Ile Ala Gln Asn Glu Ser Pro Thr Leu Gln Ser 150 155 Asn Glu Trp 163

<210> 899 <211> 352 <212>Amino acid <213> Homo sapiens

<400> 899

Arg His Ala Arg Pro Gly Gly Gly His Ser Asn Gln Arg Lys Met 10 Ser Leu Glu Glu Glu Glu Thr Gln Pro Gly Arg Leu Leu Gly Arg 25 Arg Asp Ala Val Pro Ala Phe Ile Glu Pro Asn Val Arg Phe Trp Ile 40 Thr Glu Arg Gln Ser Phe Ile Arg Arg Phe Leu Gln Trp Thr Glu Leu Leu Asp Pro Thr Asn Val Phe Ile Ser Val Glu Ser Ile Glu Asn Ser 75 Arg Gln Leu Leu Cys Thr Asn Glu Asp Val Ser Ser Pro Ala Ser Ala 85 Asp Gln Arg Ile Gln Glu Ala Trp Lys Arg Ser Leu Ala Thr Val His 100 105 110 Pro Asp Ser Ser Asn Leu Ile Pro Lys Leu Phe Arg Pro Ala Ala Phe 120 125 Leu Pro Phe Met Ala Pro Thr Val Phe Leu Ser Met Thr Pro Leu Lys 135 140 Gly Ile Lys Ser Val Ile Leu Pro Gln Val Phe Leu Cys Ala Tyr Met 150 155 Ala Ala Phe Asn Ser Ile Asn Gly Asn Arg Ser Tyr Thr Cys Lys Pro 165 170 Leu Glu Arg Ser Leu Leu Met Ala Gly Ala Val Ala Ser Ser Thr Phe 180 185 Leu Gly Val Ile Pro Gln Phe Val Gln Met Lys Tyr Gly Leu Thr Gly 200 Pro Trp Ile Lys Arg Leu Leu Pro Val Ile Phe Leu Val Gln Ala Ser 215 220 Gly Met Asn Val Tyr Met Ser Arg Ser Leu Glu Ser Ile Lys Gly Ile 230 235 Ala Val Met Asp Lys Glu Gly Asn Val Leu Gly His Ser Arg Ile Ala 245 250 Gly Thr Lys Ala Val Arg Glu Thr Leu Ala Ser Arg Ile Val Leu Phe 260 265 Gly Thr Ser Ala Leu Ile Pro Glu Val Phe Thr Tyr Phe Phe Lys Arg 280 Thr Gln Tyr Phe Arg Lys Asn Pro Gly Ser Leu Trp Ile Leu Lys Leu 295 Ser Cys Thr Val Leu Ala Met Gly Leu Met Val Pro Phe Ser Phe Ser 310 315 Ile Phe Pro Gln Ile Gly Gln Ile Gln Tyr Cys Ser Leu Glu Glu Lys 325 330 Ile Gln Ser Pro Thr Glu Glu Thr Glu Ile Phe Tyr His Arg Gly Val 345

<210> 900 <211> 186 <212>Amino acid <213> Homo sapiens

Lys Thr Gly Ser Gly Phe Met Trp Val Asp Asp Ile Gln Cys Pro Lys Thr His Ile Ser Ile Trp Gln Cys Leu Ser Ala Pro Trp Glu Arg Arg 70 Ile Ser Ser Pro Ala Glu Glu Thr Trp Ile Thr Cys Glu Asp Arg Ile 90 Arg Val Arg Gly Gly Asp Thr Glu Cys Ser Gly Arg Val Glu Ile Trp 105 His Ala Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Leu Ala 120 Glu Ala Glu Val Val Cys Gln Gln Leu Gly Cys Gly Ser Ala Leu Ala 135 Ala Leu Arg Asp Ala Ser Phe Gly Gln Gly Thr Gly Thr Ile Trp Leu 150 155 Asp Asp Met Arg Cys Lys Gly Asn Glu Ser Phe Leu Trp Asp Cys His 170 165 Ala Lys Pro Trp Gly Gln Ser Asp Cys Gly

<210> 901 <211> 365 <212>Amino acid <213> Homo sapiens

<400> 901 Leu Gly Asp Phe Pro Gln Pro Gln Arg Gln Arg Pro Gly Ala Ser 10 Asp Leu Pro Pro His Leu Ala Gly Ala Arg Gln Trp Glu Val Arg Phe 25 Phe Arg His Leu Pro Ala Arg Thr Leu Pro Pro Ser Leu Arg Met Pro 40 Glu Gly Pro Glu Leu His Leu Ala Ser Gln Phe Val Asn Glu Ala Cys Arg Ala Leu Val Phe Gly Gly Cys Val Glu Lys Ser Ser Val Ser Arg Asn Pro Glu Val Pro Phe Glu Ser Ser Ala Tyr Arg Ile Ser Ala Ser 90 Ala Arg Gly Lys Glu Leu Arg Leu Ile Leu Ser Pro Leu Pro Gly Ala 105 Gln Pro Gln Glu Pro Leu Ala Leu Val Phe Arg Phe Gly Met Ser 120 Gly Ser Phe Gln Leu Val Pro Arg Glu Glu Leu Pro Arg His Ala His 135 140 Leu Arg Phe Tyr Thr Ala Pro Pro Gly Pro Arg Leu Ala Leu Cys Phe 150 155 Val Asp Ile Arg Arg Phe Gly Arg Trp Asp Leu Gly Gly Lys Trp Gln 165 170 Pro Gly Arg Gly Pro Cys Val Leu Gln Glu Tyr Gln Gln Phe Arg Glu 185 Asn Val Leu Arg Asn Leu Ala Asp Lys Ala Phe Asp Arg Pro Ile Cys 200 Glu Ala Leu Leu Asp Gln Arg Phe Phe Asn Gly Ile Gly Asn Tyr Leu 215 220 Arg Ala Glu Ile Leu Tyr Arg Leu Lys Ile Pro Pro Phe Glu Lys Ala 230 235 Arg Ser Val Leu Glu Ala Leu Gln Gln His Arg Pro Ser Pro Glu Leu 250 Thr Leu Ser Gln Lys Ile Arg Thr Lys Leu Gln Asn Pro Asp Leu Leu 260 265

Glu Leu Cys His Ser Val Pro Lys Glu Val Val Gln Leu Gly Gly Arg 280 Gly Tyr Gly Ser Glu Ser Gly Glu Glu Asp Phe Ala Ala Phe Arg Ala 290 295 300 Trp Leu Arg Cys Tyr Gly Met Pro Gly Met Ser Ser Leu Gln Asp Arg 310 315 His Gly Arg Thr Ile Trp Phe Gln Gly Asp Pro Gly Pro Leu Ala Pro 325 330 Lys Gly Arg Lys Ser Arg Lys Lys Ser Lys Ala Thr Gln Leu Ser 340 345 Pro Glu Asp Arg Val Glu Asp Ala Leu Pro Pro Ser Lys 360

<210> 902 <211> 110 <212>Amino acid <213> Homo sapiens

<400> 902 Leu Thr Trp Ser Ala Cys Tyr Trp Arg Asp Ile Leu Arg Ile Gln Leu 10 Trp Ile Ala Ala Asp Ile Leu Leu Arg Met Leu Glu Lys Ala Leu Leu 25 Tyr Ser Glu His Gln Asn Ile Ser Asn Thr Gly Leu Ser Ser Gln Gly 40 Leu Leu Ile Phe Ala Glu Leu Ile Pro Ala Ile Lys Arg Thr Leu Ala 55 Arg Leu Leu Val Ile Ile Ala Ser Leu Asp Tyr Gly Ile Glu Lys Pro 70 His Leu Gly Thr Gly Met His Arg Val Ile Gly Leu Met Leu Leu Tyr 85 90 Leu Ile Phe Ala Asn Ala Glu Ser Val Ile Arg Val Ile Gly 105

<210> 903 <211> 44 <212>Amino acid <213> Homo sapiens

<210> 904 <211> 190 <212>Amino acid <213> Homo sapiens

<400> 904 Tyr Glu Cys Glu Glu Leu Ala Lys Lys Leu Glu Asn Ser Gln Arg Asp Gly Ile Ser Arg Asn Lys Leu Ala Leu Ala Glu Leu Tyr Glu Asp Glu Val Lys Cys Lys Ser Ser Lys Ser Asn Arg Pro Lys Ala Thr Val Phe 40 Lys Ser Pro Arg Thr Pro Pro Gln Arg Phe Tyr Ser Ser Glu His Glu Tyr Ser Gly Leu Asn Ile Val Arg Pro Ser Thr Gly Lys Ile Val Asn 70 75 Glu Leu Phe Lys Glu Ala Arg Glu His Gly Ala Val Pro Leu Asn Glu 85 Ala Thr Arg Ala Ser Gly Asp Asp Lys Ser Lys Ser Phe Thr Gly Gly 105 Gly Tyr Arg Leu Gly Ser Ser Phe Cys Lys Arg Ser Glu Tyr Ile Tyr 120 Gly Glu Asn Gln Leu Gln Asp Val Gln Ile Leu Leu Lys Leu Trp Ser 135 Asn Gly Phe Ser Leu Asp Asp Gly Glu Leu Arg Pro Tyr Asn Glu Pro 150 Thr Asn Ala Gln Phe Leu Glu Ser Val Lys Arg Gly Val Thr Leu Ile 170 Ala Cys Met Pro Glu Ile Gln Gln Leu Met Leu Glu Ile Phe 185

<210> 905 <211> 414 <212>Amino acid <213> Homo sapiens

<400> 905 Trp Pro Cys Gly Ala Ala Pro Gly Leu Thr His Ala Ser Glu Arg Met Phe Thr Leu Thr Thr Met Ile Gln Ala Leu Ala Pro Val Met Gly Trp Asp Arg Lys Pro Leu Lys Met Phe Ser Ser Glu Glu Met Arg Gly His Leu His His His Lys Cys Leu Thr Lys Ile Leu Lys Val Glu Gly 55 Gln Val Pro Asp Leu Pro Ser Cys Leu Pro Leu Thr Asp Asn Thr Arg 75 Met Leu Ala Ser Ile Leu Ile Asn Met Leu Tyr Asp Asp Leu Arg Cys 85 90 Asp Pro Glu Arg Asp His Phe Arg Lys Ile Cys Glu Glu Tyr Ile Thr 105 Gly Lys Phe Asp Pro Gln Asp Met Asp Lys Asn Leu Asn Ala Ile Gln 120 Thr Val Ser Gly Ile Leu Gln Gly Pro Phe Asp Leu Gly Asn Gln Leu 140 135 Leu Gly Leu Lys Gly Val Met Glu Met Met Val Ala Leu Cys Gly Ser 150 155 Glu Arg Glu Thr Asp Gln Leu Val Ala Val Glu Ala Leu Ile His Ala 165 170 Ser Thr Lys Leu Ser Arg Ala Thr Phe Ile Ile Thr Asn Gly Val Ser 185

Leu Leu Lys Gln Ile Tyr Lys Thr Thr Lys Asn Glu Lys Ile Lys Ile 195 200 Arg Thr Leu Val Gly Leu Cys Lys Leu Gly Ser Ala Gly Gly Thr Asp 215 Tyr Gly Leu Arg Gln Phe Ala Glu Gly Ser Thr Glu Lys Leu Ala Lys 230 235 Gln Cys Arg Lys Trp Leu Cys Asn Met Ser Ile Asp Thr Arg Thr Arg . 250 245 Arg Trp Ala Val Glu Gly Leu Ala Tyr Leu Thr Leu Asp Ala Asp Val 265 Lys Asp Asp Phe Val Gln Asp Val Pro Ala Leu Gln Ala Met Phe Glu 280 285 Leu Ala Lys Thr Ser Asp Lys Thr Ile Leu Tyr Ser Val Ala Thr Thr 295 Leu Val Asn Cys Thr Asn Ser Tyr Asp Val Lys Glu Val Ile Pro Glu 310 315 Leu Val Gln Leu Ala Lys Phe Ser Lys Gln His Val Pro Glu Glu His 330 Pro Lys Asp Lys Lys Asp Phe Ile Asp Met Arg Val Lys Arg Leu Leu 345 Lys Ala Gly Val Ile Ser Ala Leu Ala Cys Met Val Lys Ala Asp Ser 360 Ala Ile Leu Thr Asp Gln Thr Lys Glu Leu Leu Ala Arg Val Phe Leu 375 Ala Leu Cys Asp Asn Pro Lys Asp Arg Gly Thr Ile Val Ala Gln Gly 390 395 Gly Gly Lys Ala Leu Ile Pro Leu Ala Leu Glu Gly Thr Asp 410

<210> 906 <211> 296 <212>Amino acid <213> Homo sapiens

<400> 906 Val Asp Ser Val Gly Gly Ser Glu Ser Arg Ser Leu Asp Ser Pro Thr Ser Ser Pro Gly Ala Gly Thr Arg Gln Leu Val Lys Ala Ser Ser Thr Gly Thr Glu Ser Ser Asp Asp Phe Glu Glu Arg Asp Pro Asp Leu 40 Gly Asp Gly Leu Glu Asn Gly Leu Gly Ser Pro Phe Gly Lys Trp Thr 55 Leu. Ser Ser Ala Ala Gln Thr His Gln Leu Arg Arg Leu Arg Gly Pro 70 75 Ala Lys Cys Arg Glu Cys Glu Ala Phe Met Val Ser Gly Thr Glu Cys 90 Glu Glu Cys Phe Leu Thr Cys His Lys Arg Cys Leu Glu Thr Leu Leu 105 Ile Leu Cys Gly His Arg Arg Leu Pro Ala Arg Thr Pro Leu Phe Gly 115 120 125 Val Asp Phe Leu Gln Leu Pro Arg Asp Phe Pro Glu Glu Val Pro Phe 135 140 Val Val Thr Lys Cys Thr Ala Glu Ile Glu His Arg Ala Leu Asp Val 150 155 Gln Gly Ile Tyr Arg Val Ser Gly Ser Arg Val Arg Val Glu Arg Leu 165 170 Cys Gln Ala Phe Glu Asn Gly Arg Ala Leu Val Glu Leu Ser Gly Asn 180 185

Ser Pro His Asp Val Ser Ser Val Leu Lys Arg Phe Leu Gln Glu Leu 200 Thr Glu Pro Val Ile Pro Phe His Leu Tyr Asp Ala Phe Ile Ser Leu 215 220 Ala Lys Thr Leu His Ala Asp Pro Gly Asp Asp Pro Gly Thr Pro Ser 235 . 230 Pro Ser Pro Glu Val Ile Arg Ser Leu Lys Thr Leu Leu Val Gln Leu 245 250 Pro Asp Ser Asn Tyr Asn Thr Leu Arg His Leu Val Ala His Leu Phe 265 Arg Val Ala Arg Phe Met Glu Asn Lys Met Ser Ala Asn Asn Leu 275 280 Gly Ile Val Phe Gly Pro Thr Leu 295 296

<210> 907 <211> 131 <212>Amino acid <213> Homo sapiens

<400> 907 Gly Leu His Val Ile Ser Leu His Ser Ala Asp Gly Arg His Trp Glu Asp Pro Leu Ser Glu Leu Asp Ser Glu Arg Val Ser Ala Phe Leu Val 25 Thr Glu Thr Leu Val Phe Tyr Leu Phe Cys Leu Leu Ala Asp Glu Thr 40 Val Val Pro Pro Asp Val Pro Ser Tyr Leu Ser Ser Gln Gly Thr Leu 55 Ser Asp Arg Gln Glu Thr Val Val Arg Thr Glu Gly Gly Pro Gln Ala 75 Asn Gly His Ile Glu Ser Asn Gly Lys Ala Ser Val Thr Val Lys Gln 90 Ser Ser Ala Val Thr Val Ser Leu Gly Ala Gly Gly Leu Gln Val 105 Phe Thr Gly Gln Val Pro Gly Ile Arg Trp Gly Lys Leu Gly Glu Ala 120 115 His Ala Ser 130 131

<210> 908 <211> 124 <212>Amino acid <213> Homo sapiens

 Ile Asp Gly Glu
 Ser Ile Gly Asn Cys
 Pro Phe Ser Gln Arg Leu
 Phe 65
 70
 75
 80

 Met Ile Leu Trp Leu Lys Gly Val Val Phe Asn Val Thr Thr Val Asp 85
 90
 95

 Leu Lys Arg Lys Pro Ala Asp Leu Arg Asn Leu Ala Pro Gly Thr His 100
 105
 110

 Pro Pro Pro Phe Leu Ala Phe Asn Trp Tyr Val Lys Thr 115
 120
 124

<210> 909 <211> 111 <212>Amino acid <213> Homo sapiens

<400> 909 Leu Gly Phe Ser Asp Gly Gln Glu Ala Arg Pro Glu Glu Ile Gly Trp 10 Leu Asn Gly Tyr Asn Glu Thr Thr Gly Glu Arg Gly Asp Phe Pro Gly 25 Thr Tyr Val Glu Tyr Ile Gly Arg Lys Lys Ile Ser Pro Pro Thr Pro 40 Lys Pro Arg Pro Pro Arg Pro Leu Pro Val Ala Pro Gly Ser Ser Lys 55 Thr Glu Ala Asp Val Glu Gln Gln Val Leu Tyr Lys Tyr Arg Lys Lys 75 Pro Ser Ser Ser His Arg Pro Gln Thr Pro His Asn Gly Lys Ser Lys 85 90 Asn Phe Leu His Lys Gln Gly Leu Lys Lys Lys Lys Ala Ser Leu 100 105

<210> 910 <211> 298 <212>Amino acid <213> Homo sapiens

<400> 910 Arg Thr Arg Gly Val Met Glu Leu Ala Leu Arg Arg Ser Pro Val Pro Arg Trp Leu Leu Leu Pro Leu Leu Leu Gly Leu Asn Ala Gly Ala 20 Val Ile Asp Trp Pro Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val 40 Thr Val Arg Lys Asp Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr 55 Asn Ser Cys Lys Asn Phe Ser Glu Leu Pro Leu Val Met Trp Leu Gln 70 Gly Gly Pro Gly Gly Ser Ser Thr Gly Phe Gly Asn Phe Glu Glu Ile 85 Gly Pro Leu Asp Ser Asp Leu Lys Pro Arg Lys Thr Thr Trp Leu Gln 100 105 Ala Ala Ser Leu Leu Phe Val Asp Asn Pro Val Gly Thr Gly Phe Ser 120 125 Tyr Val Asn Gly Ser Gly Ala Tyr Ala Lys Asp Leu Ala Met Val Ala 130 135

Ser Asp Met Met Gly Leu Leu Lys Thr Phe Phe Ser Cys His Lys Glu 150 155 Phe Gln Thr Val Pro Phe Tyr Ile Phe Ser Glu Ser Tyr Gly Gly Lys 165 170 Met Ala Ala Gly Ile Gly Leu Glu Leu Tyr Lys Ala Ile Gln Arg Gly 180 185 Thr Ile Lys Cys Asn Phe Ala Gly Val Ala Leu Gly Asp Ser Trp Ile 200 Ser Pro Val Asp Ser Val Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met 215 220 Ser Leu Leu Glu Asp Lys Gly Leu Ala Glu Val Ser Lys Val Ala Glu 230 235 Gln Val Leu Asn Ala Val Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu 250 Leu Trp Gly Lys Ala Glu Met Ile Ile Glu Gln Val Lys Arg Gly Asn 265 Thr Gln Arg Arg Ala Cys Leu Ala Phe Ser Gly Gly Tyr Arg Ala His 280 285 Gly Trp Cys Cys Gln Thr Trp Ser Leu His 295

<211> 213
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(213)
<223> X = any amino acid or stop code

<210> 911

<400> 911 Pro Gly Trp Ser Arg Ser Pro Asp Leu Val Ile Arg Leu Pro Arg Pro 5 10 Pro Lys Val Leu Gly Leu Gln Tyr Tyr His Phe Phe Phe Leu Arg 25 Trp Ser Leu Asp Ser Val Ala Gln Ala Glu Val Gln Trp His Asp Leu 35 . Arg Ser Leu Gln Ala Pro Pro Pro Gly Phe Thr Pro Phe Ser Cys Leu 55 Ser Leu Pro Gly Ser Trp Asp Tyr Arg Cys Pro Pro Pro Arg Pro Ala 70 75 Asn Phe Leu Tyr Phe Xaa Xaa Arg Arg Gly Phe Thr Val Leu Ala Arg 90 85 Met Val Ser Ile Ser Xaa Pro Arg Asp Pro Pro Ala Ser Ala Ser Gln 105 Ser Ala Gly Ile Thr Val Leu Ser Leu Phe Phe Phe Glu Met Glu 120 Ser Cys Ser Val Ala Gln Ala Gly Val Gln Trp Arg Tyr Leu Gly Ser 135 140 Leu Gln Ala Leu Pro Pro Gly Phe Thr Pro Phe Ser Cys Leu Ser Leu 150 155 Pro Ser Ser Trp Asp Tyr Arg Arg Pro Pro Pro Arg Pro Ala Asn Phe 170 Phe Val Phe Leu Val Glu Thr Gly Val Ser Pro Cys Xaa Pro Gly Trp 185 Ser Arg Ser Pro Asp Leu Val Ile Arg Leu Pro Gln Pro Pro Lys Val 200 Leu Gly Leu Gln Val

210 213

<210> 912 <211> 583 <212>Amino acid <213> Homo sapiens

<400> 912 Pro Ser Met Lys Thr Gly Glu Leu Glu Lys Glu Thr Ala Pro Leu Arg 10 Lys Asp Ala Asp Ser Ser Ile Ser Val Leu Glu Ile His Ser Gln Lys 25 Ala Gln Ile Glu Glu Pro Asp Pro Pro Glu Met Glu Thr Ser Leu Asp 40 Ser Ser Glu Met Ala Lys Asp Leu Ser Ser Lys Thr Ala Leu Ser Ser 55 Thr Glu Ser Cys Thr Met Lys Gly Glu Glu Lys Ser Pro Lys Thr Lys Lys Asp Lys Arg Pro Pro Ile Leu Glu Cys Leu Glu Lys Leu Glu Lys 90 Ser Lys Lys Thr Phe Leu Asp Lys Asp Ala Gln Arg Leu Ser Pro Ile 100 105 110 Pro Glu Glu Val Pro Lys Ser Thr Leu Glu Ser Glu Lys Pro Gly Ser 120 125 115 Pro Glu Ala Ala Glu Thr Ser Pro Pro Ser Asn Ile Ile Asp His Cys 130 135 140 Glu Lys Leu Ala Ser Glu Lys Glu Val Val Glu Cys Gln Ser Thr Ser 150 155 160 Thr Val Gly Gly Gln Ser Val Lys Lys Val Asp Leu Glu Thr Leu Lys ... 165 170 175 Glu Asp Ser Glu Phe Thr Lys Val Glu Met Asp Asn Leu Asp Asn Ala 185 190 Gln Thr Ser Gly Ile Glu Glu Pro Ser Glu Thr Lys Gly Ser Met Gln 200 · Lys Ser Lys Phe Lys Tyr Lys Leu Val Pro Glu Glu Glu Thr Thr Ala 215 Ser Glu Asn Thr Glu Ile Thr Ser Glu Arg Gln Lys Glu Gly Ile Lys 230 235 Leu Thr Ile Arg Ile Ser Ser Arg Lys Lys Pro Asp Ser Pro Pro 245 250 Lys Val Leu Glu Pro Glu Asn Lys Gln Glu Lys Thr Glu Lys Glu Glu 265 270 Glu Lys Thr Asn Val Gly Arg Thr Leu Arg Arg Ser Pro Arg Ile Ser 280 Arg Pro Thr Ala Lys Val Ala Glu Ile Arg Asp Gln Lys Ala Asp Lys 295 300 Lys Arg Gly Glu Glu Glu Glu Glu Glu Glu Ser Thr Ala Leu 310 315 Gln Lys Thr Asp Lys Lys Glu Ile Leu Lys Lys Ser Glu Lys Asp Thr 325 330 Asn Ser Lys Val Ser Lys Val Lys Pro Lys Gly Lys Val Arg Trp Thr 345 350 Gly Ser Arg Thr Arg Gly Arg Trp Lys Tyr Ser Ser Asn Asp Glu Ser 360 Glu Gly Ser Gly Ser Glu Lys Ser Ser Ala Ala Ser Glu Glu Glu Glu 375 380 Glu Lys Glu Ser Glu Glu Ala Ile Leu Ala Asp Asp Asp Glu Pro Cys 395 Lys Lys Cys Gly Leu Pro Asn His Pro Glu Leu Ile Leu Cys Asp

405 410 Ser Cys Asp Ser Gly Tyr His Thr Ala Leu Pro Phe Ala Pro Pro Leu 425 Met Ile His Pro Gln Met Gly Gly Trp Phe Cys Pro Thr Phe Cys Pro 440 Thr Leu Asn Leu Leu Leu Glu Lys Leu Glu Asp Gln Phe Gln Asp 455 460 Leu Asp Val Ala Leu Lys Lys Glu Arg Ala Leu Pro Glu Arg Arg Lys 470 475 480 Glu Arg Leu Val Tyr Val Gly Ile Ser Ile Glu Asn Ile Ile Pro Pro 490 495 485 Gln Glu Pro Asp Phe Ser Glu Asp Gln Glu Glu Lys Lys Asp Ser 500 505 Lys Lys Ser Lys Ala Asn Leu Leu Glu Arg Arg Ser Thr Arg Thr Arg 520 Lys Cys Ile Ser Tyr Arg Phe Asp Glu Phe Asp Glu Ala Ile Asp Glu 530 535 Ala Ile Glu Asp Asp Ile Lys Glu Ala Asp Gly Gly Val Gly Arg 545 550 555 Gly Lys Asp Ile Ser Thr Ile Thr Gly His Arg Gly Lys Asp Ile Ser 565 570 Thr Ile Leu Asp Glu Glu Arg 580

<210> 913 <211> 178 <212>Amino acid <213> Homo sapiens

<400> 913 Lys Arg Arg Gly Ser Phe Lys Met Ala Glu Leu Asp Gln Leu Pro Asp 5 10 Glu Ser Ser Ser Ala Lys Ala Leu Val Ser Leu Lys Glu Gly Ser Leu . 30 25 Ser Asn Thr Trp Asn Glu Lys Tyr Ser Ser Leu Gln Lys Thr Pro Val 40 45 Trp Lys Gly Arg Asn Thr Ser Ser Ala Val Glu Met Pro Phe Arg Asn 55 Ser Lys Arg Ser Arg Leu Phe Ser Asp Glu Asp Asp Arg Gln Ile Asn 70 Thr Arg Ser Pro Lys Arg Asn Gln Arg Val Ala Met Val Pro Gln Lys 90 Phe Thr Ala Thr Met Ser Thr Pro Asp Lys Lys Ala Ser Gln Lys Ile 100 105 Gly Phe Arg Leu Arg Asn Leu Leu Lys Leu Pro Lys Ala His Lys Trp 120 125 Cys Ile Tyr Glu Trp Phe Tyr Ser Asn Ile Asp Lys Pro Leu Phe Glu 135 Gly Asp Asn Asp Phe Cys Val Cys Leu Lys Glu Ser Phe Pro Asn Leu 145 150 155 160 Lys Thr Arg Lys Leu Thr Arg Val Glu Trp Gly Lys Ile Arg Arg Leu 170 Met Gly 178

<210> 914 <211> 158 <212>Amino acid

<213> Homo sapiens

<220>

<221> misc feature

<222> (1) ... (158)

<223> X = any amino acid or stop code

<400> 914

Met Pro Glu Tyr Leu Arg Lys Arg Phe Gly Gly Ile Arg Ile Pro Ile 10 Ile Leu Ala Val Leu Tyr Leu Phe Ile Tyr Ile Phe Thr Lys Ile Ser '20 25 Val Asp Met Tyr Ala Gly Ala Ile Phe Ile Gln Gln Ser Leu His Leu 40 Asp Leu Tyr Leu Ala Ile Val Gly Leu Leu Ala Ile Thr Ala Val Tyr 55 Thr Val Ala Gly Gly Leu Ala Ala Val Ile Tyr Thr Asp Ala Leu Gln 70 75 Thr Leu Ile Met Leu Ile Gly Ala Leu Thr Leu Met Gly Tyr Ser Phe 85 90 Ala Ala Val Gly Gly Met Glu Gly Leu Lys Glu Lys Tyr Phe Leu Ala 100 105 Leu Ala Ser Asn Arg Ser Glu Asn Ser Ser Cys Gly Leu Pro Arg Glu 120 125 Asp Ala Phe His Ile Phe Arg Asp Pro Leu Thr Ser Asp Leu Pro Trp

140

155

<210> 915

<211> 108

<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(108)

<223> X = any amino acid or stop code

135

150

Pro Gly Val Leu Phe Gly Met Ser Ile Pro Ser Leu Xaa

'<400> 915

<210> 916 <211> 45 <212>Amino acid <213> Homo sapiens

<210> 917 <211> 180 <212>Amino acid <213> Homo sapiens

<400> 917 Val His Val Cys Ser Ser Lys Met Gly Ala Leu Ser Thr Glu Arg Leu 15 1 5 10 Gln Tyr Tyr Thr Gln Glu Leu Gly Val Arg Glu Arg Ser Gly His Ser 30 25 Val Ser Leu Ile Asp Leu Trp Gly Leu Leu Val Glu Tyr Leu Leu Tyr 40 Gln Glu Glu Asn Pro Ala Lys Leu Ser Asp Gln Gln Glu Ala Val Arg 55 Gln Gly Gln Asn Pro Tyr Pro Ile Tyr Thr Ser Val Asn Val Arg Thr 70 75 Asn Leu Ser Gly Glu Asp Phe Ala Glu Trp Cys Glu Phe Thr Pro Tyr 90 85 Glu Val Gly Phe Pro Lys Tyr Gly Ala Tyr Val Pro Thr Glu Leu Phe 105 Gly Ser Glu Leu Phe Met Gly Arg Leu Leu Gln Leu Gln Pro Glu Pro 120 Arg Ile Cys Tyr Leu Gln Gly Met Trp Gly Ser Ala Phe Ala Thr Ser 140 135 Leu Asp Glu Ile Phe Leu Lys Thr Ala Gly Ser Gly Leu Ser Phe Leu 145 150 155 160 Glu Trp Tyr Arg Gly Ser Val Asn Ile Thr Asp Asp Cys Gln Lys Pro 165 170 Gln Leu His Asn 180

<210> 918 <211> 281 <212>Amino acid <213> Homo sapiens

<400> 918 Glu Phe Leu Gly Arg Pro Thr Arg Pro Ala Lys Asp Glu Gly Asn Asp 10 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp 25 Glu Gly Lys Asp Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Asn Asp Glu Gly Lys Asp Glu Gly Lys Asp 85 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp 100 110 Glu Arg Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Arg Lys Asp 120 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp 135 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Asn Asp 150 155 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp 165 170 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Asn Asp Glu Gly Asn Asp 180 185 190 Glu Gly Asn Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Arg Asn Asp 200 205 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp 215 220 Glu Arg Asn Asp Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp 230 235 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp 245 250 Glu Gly Asn Asp Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp 260 265 Glu Gly Lys Asp Glu Gly Lys Asp Lys 280 281

<210> 919 <211> 147 <212>Amino acid <213> Homo sapiens

<400> 919 Pro Ser Leu Arg Pro Ala Trp His Glu Gly Glu Asp Phe Ser Tyr Gly 5 10 Leu Gln Pro Tyr Cys Gly Tyr Ser Phe Gln Val Val Gly Glu Met Ile 20 25 Arg Asn Arg Glu Val Leu Pro Cys Pro Asp Asp Cys Pro Ala Trp Ala 40 Tyr Ala Leu Met Ile Glu Gly Trp Asn Glu Phe Pro Ser Arg Arg Ala 55 Arg Phe Lys Asp Ile His Ser Arg Leu Arg Ala Trp Gly Asn Leu Ser 70 75 Asn Tyr Asn Ser Ser Glu Gln Thr Ser Gly Gly Arg Asn Thr Thr Gln 85 90 Thr Ser Ser Leu Ser Thr Ser Pro Leu Cys Asn Val Ser Asn Ala Pro 105 Tyr Val Gly Pro Lys Gln Lys Val Pro Pro Phe Pro Gln Thr Gln Val

<210> 920 <211> 150 <212>Amino acid <213> Homo sapiens

<400> 920 Arg Asn Ser Gly Arg His Pro Arg Val Arg Trp Ile Leu Glu Glu Arg 10 Lys Arg Val Met Gln Glu Ala Cys Ala Lys Tyr Arg Ala Ser Ser Ser 20 25 Arg Arg Ala Val Thr Pro Arg His Val Ser Arg Ile Phe Val Glu Asp 35 40 Arg His Arg Val Leu Tyr Cys Glu Val Pro Lys Ala Gly Cys Ser Asn 55 Trp Lys Arg Val Leu Met Val Leu Ala Gly Leu Ala Ser Ser Thr Ala 75 Asp Ile Gln His Asn Thr Val His Tyr Gly Ser Ala Leu Lys Arg Leu 90 Asp Thr Phe Asp Arg Gln Gly Ile Leu His Arg Leu Ser Thr Tyr Thr 105 Lys Met Leu Phe Val Arg Glu Pro Phe Glu Arg Leu Val Ser Ala Phe 120 125 Arg Asp Lys Phe Glu His Pro Asn Ser Tyr Tyr His Pro Val Phe Cys 130 135 Met Ala Ile Leu Ala Arg

<210> 921 <211> 125 <212>Amino acid <213> Homo sapiens

<400> 921 Ile Met Tyr Ser Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu 1 5 10 Tyr Val Cys Thr Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu 20 25 Leu Pro Phe Leu Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser 35 40 Pro Glu Glu Gln Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser 55 Phe His Ile Asp Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn 70 75 Lys Leu Ceu Gln Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys · 85 90 Trp Ser Asp Lys Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro 105 Ser Ser Ile Asp Ile Ile Asp Gly Thr Lys Glu Lys Lys

115 120 125

<210> 922 <211> 111 <212>Amino acid <213> Homo sapiens

<400> 922 Gly Pro His Val Val Leu Val Leu Arg Arg Cys Phe Leu Leu Ser Tyr 10 Phe Lys Gly Val Glu Lys Ala Lys Ala Met Pro Ser Pro Arg Ile Leu 25 Lys Thr His Leu Ser Thr Gln Leu Leu Pro Pro Ser Phe Trp Glu Asn 40 Asn Cys Lys Val Arg Tyr Gln Gln Leu Pro Val Thr Glu Gly Lys Val 55 60 Ser Gln Pro Lys Arg Val Leu Gln Thr Pro Thr Gln Ser Ile Arg Asp 70 75 His Leu Cys Leu Ser Thr Val Ser Asp Ala Tyr Gln Gln Arg Glu Asn 85 90 Ile Lys Phe Tyr Ile Gln Gln Asp Ile His Leu Asn Ser Phe Lys 100 105

<210> 923 <211> 69 <212>Amino acid <213> Homo sapiens

<210> 924

<211> 120 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(120) <223> X = any amino acid or stop code

<400> 924 Lys Met Met Ile Xaa Gly Leu Phe Glu Ile Gln Gln Cys Pro Ile Gly 10 Lys His Cys Asn Phe Leu Gln Val Leu Arg Asn Pro Asn Arg Asp Leu Trp Leu Val Ser Ser Phe Gly Lys Ser Ser Lys Gly Arg Glu Arg Met Gly His His Asp Glu Tyr Tyr Arg Leu Arg Gly Arg His Asn Pro Ser 55 Pro Asp His Ser Tyr Lys Arg Asn Gly Glu Ser Glu Arg Lys Arg Lys 70 75 Lys Ser His Xaa His Met Ser Lys Ser Gln Glu Arg His Asn Ser Pro 85 90 Ser Arg Gly Arg Asn Ser Asp Arg Ser Gly Gly Arg Cys Ser Arg Ser 100 105 Asp Asn Gly Arg Ser Arg Tyr Arg 115

<210> 925
<211> 108
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(108)
<223> X = any amino acid or stop code

<400> 925 Pro Leu Ser Leu Phe Ala Arg Val Ala Gly Ser Arg Val Glu Met Pro 5 10 Glu Pro Pro Gly Leu Gly Asp Glu Gly Arg Pro Leu Leu His Pro Gly 20 25 Arg Arg Glu Ala Val Gly Ser Trp Val Ser Ala Phe Ala Gly Asp Ser 40 45 Thr Pro Cys Gly Pro Gly Asp Leu Ser Val Pro Arg Arg Glu Pro Phe 60 55 Arg Leu Thr Ala Leu Xaa Pro His Arg Ser Pro Val Val Arg Thr Ser 75 70 Leu Ile Gly Leu Leu Gly Phe Ser Val Lys Glu Glu Leu Arg Gly 90 Val Gly Trp Ala Ala Arg Thr Pro Leu Gly Ile Arg 105

<210> 926 <211> 305 <212>Amino acid <213> Homo sapiens

20 25 Leu Thr Asp Leu Gln Leu Gln Glu Ala Asp Glu Glu Lys Glu Arg Ile 40 Leu Ala Gln Leu Arg Glu Leu Glu Lys Lys Lys Leu Glu Asp Ala 55 Lys Ser Gln Glu Gln Val Phe Gly Leu Asp Lys Glu Leu Lys Lys Leu 70 75 Lys Lys Ala Val Ala Thr Ser Asp Lys Leu Ala Thr Ala Glu Leu Thr 85 90 Ile Ala Lys Asp Gln Leu Lys Ser Leu His Gly Thr Val Met Lys Ile 100 105 Asn Gln Glu Arg Ala Glu Glu Leu Gln Glu Ala Glu Arg Phe Ser Arg 120 Lys Ala Ala Gln Ala Ala Arg Asp Leu Thr Arg Ala Glu Ala Glu Ile 135 140 Glu Leu Leu Gln Asn Leu Leu Arg Gln Lys Gly Glu Gln Phe Arg Leu 150 155 Glu Met Glu Lys Thr Gly Val Gly Thr Gly Ala Asn Ser Gln Val Leu 165 170 Glu Ile Glu Lys Leu Asn Glu Thr Met Glu Arg Gln Arg Thr Glu Ile 180 185 Ala Arg Leu Gln Asn Val Leu Tyr Leu Thr Gly Ser Asp Asn Lys Gly 195 200 Gly Phe Glu Asn Val Leu Glu Glu Ile Ala Glu Leu Arg Arg Glu Gly 215 220 Ser Tyr Gln Asn Asp Tyr Ile Ser Ser Met Ala Asp Pro Phe Lys Arg 230 235 Arg Gly Tyr Trp Tyr Phe Met Pro Pro Pro Pro Ser Ser Lys Val Ser 245 250 Ser His Ser Ser Gln Ala Thr Lys Asp Ser Gly Val Gly Leu Lys Tyr 265 270 Ser Ala Ser Thr Pro Val Arg Lys Pro Arg Pro Gly Gln Gln Asp Gly 280 285 Lys Glu Gly Ser Gln Pro Pro Pro Ala Ser Gly Tyr Trp Val Tyr Ser 295 300 Pro 305

<210> 927 <211> 303 <212>Amino acid <213> Homo sapiens

`<400> 927

 Ser Asp Ala
 Ser Ser Ser Phe Lys
 Thr Arg Val
 Ile Val
 Val Val
 Pro Arg Pro 15

 Arg Val
 Phe Pro Leu Gly
 Ser Ala
 Ile Thr Glu Asn Ser Leu Gly Ser 30

 Asp Ser Gln Ile Gly
 Gly Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Leu 35

 Val Ala Asp Lys
 Val Ile Val Thr Ser Lys His Asn Asn Asp Thr Gln 55

 Fis Ile Trp Glu Ser Asp Ser Asp Ser Asn Glu Phe Ser Val Ile Ala Asp Pro 65

 Arg Gly Asn Thr Leu Gly Arg Gly Thr Thr Ile Thr Leu Val Leu Lys 90

 Glu Glu Ala Ser Asp Tyr Leu Glu Leu Asp Thr Ile Lys Asn Leu Val 100

 Lys Lys Tyr Ser Gln Phe Ile Asn Phe Pro Ile Tyr Val Trp Ser Ser

120 Lys Thr Glu Thr Val Glu Glu Pro Met Glu Glu Glu Ala Ala Lys 135 Glu Glu Lys Glu Glu Ser Asp Asp Glu Ala Ala Val Glu Glu Glu Glu 150 155 Glu Glu Lys Lys Pro Lys Thr Lys Lys Val Glu Lys Thr Val Trp Asp 170 165 Trp Glu Leu Met Asn Asp Ile Lys Pro Ile Trp Gln Arg Pro Ser Lys 180 185 Glu Val Glu Glu Asp Glu Tyr Lys Ala Phe Tyr Lys Ser Phe Ser Lys 200 205 Glu Ser Asp Asp Pro Met Ala Tyr Ile His Phe Thr Ala Glu Gly Glu 215 Val Thr Phe Lys Ser Ile Leu Phe Val Pro Thr Ser Ala Pro Arg Gly 230 235 Leu Phe Asp Glu Tyr Gly Ser Lys Lys Ser Asp Tyr Ile Lys Leu Tyr 245 250 255 Val Arg Arg Val Phe Ile Thr Asp Asp Phe His Asp Met Met Pro Lys 260 265 270 Tyr Leu Asn Phe Val Lys Gly Val Val Asp Ser Asp Asp Leu Pro Leu 280 285 Asn Val Ser Arg Glu Thr Leu Gln Gln His Lys Leu Leu Lys Val 295 300 303

<210> 928 <211> 147 <212>Amino acid <213> Homo sapiens

<400> 928 Cys Gly Ser Trp Met Arg Arg Ala Leu Ile Pro Pro Cys Arg Gly Gly 10 Pro Ser Ala Ser Asp Arg Cys Cys Ser Cys Ser Pro Ser Gly Phe Ser 25 Ala Gly Arg Gly Arg Cys Pro Val Gln Gly Cys Leu Arg Pro His Arg 40 Val Gln Leu Leu Arg Arg Trp Gly Pro Gly Ser Pro Ala Gly Gln Arg 55 Leu Ser Lys Gly Phe Gln Leu Leu Arg Trp Trp Gly Pro Gly Ser Pro 75 70 Ala Pro Glu Pro Arg Lys Gly Pro Phe Pro Pro Pro Asp Pro Pro Trp 85 90 Pro Val Thr Ala Val Thr Val Met Ala Gly Ser Val Pro Ser Ala Gln 105 Ser Val Asp Ala Leu Glu Ser Pro Gly Pro Leu Ala Leu Glu Gly Pro 120 Ser Ser Pro Arg Asn Leu Leu Trp Arg Glu Met Ser Ile Phe Leu Pro 135 130 Gly Ile Phe 145 147

<210> 929 <211> 183 <212>Amino acid <213> Homo sapiens

<400> 929 Pro Gly Pro Thr Pro Pro Pro Arg His Gly Ser Pro Pro His Arg Leu Ile Arg Val Glu Thr Pro Gly Pro Pro Ala Pro Pro Ala Asp Glu Arg 20 25 Ile Ser Gly Pro Pro Ala Ser Ser Asp Arg Leu Ala Ile Leu Glu Asp 40 Tyr Ala Asp Pro Phe Asp Val Gln Glu Thr Gly Glu Gly Ser Ala Gly 55 Ala Ser Gly Ala Pro Glu Lys Val Pro Glu Asn Asp Gly Tyr Met Glu 70 75 Pro Tyr Glu Ala Gln Lys Met Met Ala Glu Ile Arg Gly Ser Lys Glu 85 90 Thr Ala Thr Gln Pro Leu Pro Leu Tyr Asp Thr Pro Tyr Glu Pro Glu 100 105 Glu Asp Gly Ala Thr Pro Glu Gly Glu Gly Ala Pro Trp Pro Arg Glu 120 125 Ser Arg Leu Pro Glu Asp Asp Glu Arg Pro Pro Glu Glu Tyr Asp Gln 135 140 Pro Trp Glu Trp Lys Lys Glu Arg Ile Ser Lys Ala Phe Ala Val Asp 150 155 Ile Lys Val Ile Lys Asp Leu Pro Trp Pro Pro Pro Val Gly Gln Leu 165 170 Asp Ser Ser Pro Ser Leu Pro 180 183

<210> 930 <211> 187 <212>Amino acid <213> Homo sapiens

<400> 930 Gln Phe Phe Ser Leu Phe Leu Arg Tyr Gln Ile His Thr Gly Leu Gln 10 His Ser Ile Ile Arg Pro Thr Gln Pro Asn Cys Leu Pro Leu Asp Asn Ala Thr Leu Pro Gln Lys Leu Lys Glu Val Gly Tyr Ser Thr His Met Val Gly Lys Trp His Leu Gly Phe Tyr Arg Lys Glu Cys Met Pro Thr 55 Arg Arg Gly Phe Asp Thr Phe Phe Gly Ser Leu Leu Gly Ser Gly Asp 70 Tyr Tyr Thr His Tyr Lys Cys Asp Ser Pro Gly Met Cys Gly Tyr Asp 90 Leu Tyr Glu Asn Asp Asn Ala Ala Trp Asp Tyr Asp Asn Gly Ile Tyr 105 Ser Thr Gln Met Tyr Thr Gln Arg Val Gln Gln Ile Leu Ala Ser His 120 Asn Pro Thr Lys Pro Ile Phe Leu Tyr Ile Ala Tyr Gln Ala Val His 135 140 Ser Pro Leu Gln Ala Pro Gly Arg Tyr Phe Glu His Tyr Arg Ser Ile 150 155 Ile Asn Ile Asn Arg Arg Tyr Ala Ala Met Leu Ser Cys Leu Asp 170 Glu Ala Ile Asn Asn Val Thr Leu Ala Leu Lys 185 . 187

<210> 931 <211> 192 <212>Amino acid <213> Homo sapiens

<400> 931 Arg Val Arg Lys Gly Arg Gly Glu Arg Leu Gln Ser Pro Leu Arg Val Pro Gln Lys Pro Glu Arg Pro Pro Leu Pro Pro Lys Pro Gln Phe Leu Asn Ser Gly Ala Tyr Pro Gln Lys Pro Leu Arg Asn Gln Gly Val 40 Val Arg Thr Leu Ser Ser Ser Ala Gln Glu Asp Ile Ile Arg Trp Phe 55 Lys Glu Glu Gln Leu Pro Leu Arg Ala Gly Tyr Gln Lys Thr Ser Asp 70 Thr Ile Ala Pro Trp Phe His Gly Ile Leu Thr Leu Lys Lys Ala Asn 85 90 Glu Leu Leu Ser Thr Gly Met Pro Gly Ser Phe Leu Ile Arg Val 100 105 110 Ser Glu Arg Ile Lys Gly Tyr Ala Leu Ser Tyr Leu Ser Glu Asp Gly 125 120 Cys Lys His Phe Leu Ile Asp Ala Ser Ala Asp Ala Tyr Ser Phe Leu 135 Gly Val Asp Gln Leu Gln His Ala Thr Leu Ala Asp Leu Val Glu Tyr 150 155 160 His Lys Glu Glu Pro Ile Thr Ser Leu Gly Lys Glu Leu Leu Leu Tyr 170 165 Pro Cys Gly Gln Gln Asp Gln Leu Pro Asp Tyr Leu Glu Leu Phe Glu

<210> 932 <211> 545 <212>Amino acid <213> Homo sapiens

<400> 932 Gly Ser Leu Glu Lys Ala Leu Phe Gln Leu Leu Lys Val Trp Gly Gln 5 10 Trp Ala Glu Gln Thr Arg Arg Leu Gln Arg Leu Asp Val Ser Leu Ser 25 Val Ala Arg Val Arg Ser Ala Gly Pro Ser Cys Gln Asn Lys Gly Asp 40 Leu Val Met Glu Ala Leu Leu Glu Gly Ile Gln Asn Arg Gly His Gly Gly Gly Phe Leu Thr Ser Cys Glu Ala Glu Leu Gln Glu Leu Met Lys 70 75 Gln Ile Asp Ile Met Val Ala His Lys Lys Ser Glu Trp Glu Gly Arg Thr His Ala Leu Glu Thr Cys Leu Lys Ile Arg Glu Gln Glu Leu Lys 105 Ser Leu Arg Ser Gln Leu Asp Val Thr His Lys Glu Val Gly Met Leu

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120
His Gln Gln Val Glu Glu His Glu Lys Ile Lys Gln Glu Met Thr Met
                      135
Glu Tyr Lys Gln Glu Leu Lys Lys Leu His Glu Glu Leu Cys Ile Leu
                   150
                                      155
Lys Arg Ser Tyr Glu Lys Leu Gln Lys Lys Gln Met Arg Glu Phe Arg
               165
                                  170
Gly Asn Thr Lys Asn His Arg Glu Asp Arg Ser Glu Ile Glu Arg Leu
           180
                              185
Thr Ala Lys Ile Glu Glu Phe Arg Gln Lys Ser Leu Asp Trp Glu Lys
                          200 .
Gln Arg Leu Ile Tyr Gln Gln Gln Val Ser Ser Leu Glu Ala Gln Arg
                      215
                                          220
Lys Ala Leu Ala Glu Gln Ser Glu Ile Ile Gln Ala Gln Leu Val Asn
                  230
                                      235
Arg Lys Gln Lys Leu Glu Ser Val Glu Leu Ser Ser Gln Ser Glu Ile
               245
                                  250
Gln His Leu Ser Ser Lys Leu Glu Arg Ala Asn Asp Thr Ile Cys Ala
                              265
Asn Glu Leu Glu Ile Glu Arg Leu Thr Met Arg Val Asn Asp Leu Val
                          280
Gly Thr Ser Met Thr Val Leu Gln Glu Gln Gln Gln Lys Glu Glu Lys
                      295
                                         300
Leu Arg Glu Ser Glu Lys Leu Glu Ala Leu Gln Glu Glu Lys Arg
                  310
                                      315
Glu Leu Lys Ala Ala Leu Gln Ser Gln Glu Asn Leu Ile His Glu Ala
                                  330
Arg Ile Gln Lys Glu Lys Leu Gln Glu Lys Val Lys Ala Thr Asn Thr
                             345
Gln His Ala Val Glu Ala Ile Ser Leu Glu Ser Val Ser Ala Thr Cys
       355
                          360
Lys Gln Leu Ser Gln Glu Leu Met Glu Lys Tyr Glu Glu Leu Lys Arg
           375
Met Glu Ala His Asn Asn Glu Tyr Lys Ala Glu Ile Lys Lys Leu Lys
       390
                            395
Glu Gln Ile Leu Gln Gly Glu Gln Ser Tyr Ser Ser Ala Leu Glu Gly
               405
                              410
Met Lys Met Glu Ile Ser His Leu Thr Gln Glu Leu His Gln Arg Asp
                              425
Ile Thr Ile Ala Ser Thr Lys Gly Ser Ser Ser Asp Met Glu Lys Arg
                          440
Leu Arg Ala Glu Met Gln Lys Ala Glu Asp Lys Ala Val Glu His Lys
                      455
Glu Ile Leu Asp Gln Leu Glu Ser Leu Lys Leu Glu Asn Arg His Leu
                   470
                                     475
Ser Glu Met Val Met Lys Leu Glu Leu Gly Leu His Glu Cys Ser Leu
                                  490
Pro Val Ser Pro Leu Gly Ser Ile Ala Thr Arg Phe Leu Glu Glu
                              505
Glu Leu Arg Ser His His Ile Leu Glu Arg Leu Asp Ala His Ile Glu
                          520
Glu Leu Lys Arg Glu Ser Glu Lys Thr Val Arg Gln Phe Thr Ala Leu
                       535
                                         540
Lys
545
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<210> 933 <211> 297 <212>Amino acid <213> Homo sapiens

<400> 933 Thr Gly Phe Leu Gly Trp Ser Gln Gly Pro Ser Leu Thr Pro Thr Ser 10 Leu Ser Ala Leu Tyr Pro Ser Gln Val Glu Glu Thr Gly Val Val Leu 25 Ser Leu Glu Gln Thr Glu Gln His Ser Arg Arg Pro Ile Gln Arg Gly 40 Ala Pro Ser Gln Lys Asp Thr Pro Asn Pro Gly Asp Ser Leu Asp Thr 55 60 Pro Gly Pro Arg Ile Leu Ala Phe Leu His Pro Pro Ser Leu Ser Glu 75 80 70 Ala Ala Leu Ala Ala Asp Pro Arg Arg Phe Cys Ser Pro Asp Leu Arg 85 90 Arg Leu Leu Gly Pro Ile Leu Asp Gly Ala Ser Val Ala Ala Thr Pro 100 105 Ser Thr Pro Leu Ala Thr Arg His Pro Gln Ser Pro Leu Ser Ala Asp 115 120 125 Leu Pro Asp Glu Leu Pro Val Gly Thr Glu Asn Val His Arg Leu Phe 135 140 Thr Ser Gly Lys Asp Thr Glu Ala Val Glu Thr Asp Leu Asp Ile Ala 150 155 Gln Asp Ala Asp Ala Leu Asp Leu Glu Met Leu Ala Pro Tyr Ile Ser 170 Met Asp Asp Asp Phe Gln Leu Asn Ala Ser Glu Gln Leu Pro Arg Ala 185 Tyr His Arg Pro Leu Gly Ala Val Pro Arg Pro Arg Ala Arg Ser Phe 195 200 205 His Gly Leu Ser Pro Pro Ala Leu Glu Pro Ser Leu Leu Pro Arg Trp 215 220 Gly Ser Asp Pro Arg Leu Ser Cys Ser Ser Pro Ser Arg Gly Asp Pro 235 230 Ser Ala Ser Ser Pro Met Ala Gly Ala Arg Lys Arg Thr Leu Ala Gln 245 250 Ser Ser Lys Asp Glu Asp Glu Gly Val Glu Leu Leu Gly Val Arg Pro 260 265 Pro Lys Arg Ser Pro Ser Pro Glu His Glu Asn Phe Leu Leu Phe Pro 275 280 Leu Ser Leu Ser Phe Leu Leu Thr Gly 295

<210> 934 <211> 140 <212>Amino acid <213> Homo sapiens

<210> 935 <211> 97 <212>Amino acid <213> Homo sapiens

<210> 936 <211> 245 <212>Amino acid <213> Homo sapiens

<400> 936 Pro Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe 10 Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu Leu Asp Gln 20 25 Val Ile Pro Pro Gly Gln Pro Ser Trp Ala Asp Gln Glu Tyr Arg Gly 40 Ser Phe Thr Cys Arg Ile Trp Gln Phe Gly Arg Trp Val Glu Val Thr 55 Thr Asp Asp Arg Leu Pro Cys Leu Ala Gly Arg Leu Cys Phe Ser Arg 75 Cys Gln Arg Glu Asp Val Phe Trp Leu Pro Leu Leu Glu Lys Val Tyr 90 Ala Lys Val His Gly Ser Tyr Glu His Leu Trp Ala Gly Gln Val Ala 105 Asp Ala Leu Val Asp Leu Thr Gly Gly Leu Ala Glu Arg Trp Asn Leu 120 125 Lys Gly Val Ala Gly Ser Gly Gly Gln Gln Asp Arg Pro Gly Arg Trp 135 140 Glu His Arg Thr Cys Arg Gln Leu Leu His Leu Lys Asp Gln Cys Leu

 145
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 Ile
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 Glu
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<210> 937 <211> 211 <212>Amino acid

<213> Homo sapiens

<400> 937 Ala Glu Cys Leu Glu Ala Ser Ile Ala Arg Tyr Ala His Arg Val Ala 10 Asn Ser Arg Tyr Thr Phe Asp Gly Glu Thr Val Thr Leu Ser Pro Ser 20 Gln Gly Val Asn Gln Leu His Gly Gly Pro Glu Gly Phe Asp Lys Arg 40 Arg Trp Gln Ile Val Asn Gln Asn Asp Arg Gln Val Leu Phe Ala Leu 50 ` 55 Ser Ser Asp Asp Gly Asp Gln Gly Phe Pro Gly Asn Leu Gly Ala Thr 70 75 Val Gln Tyr Arg Leu Thr Asp Asp Asn Arg Ile Ser Ile Thr Tyr Arg 90 85 Ala Thr Val Asp Lys Pro Cys Pro Val Asn Met Thr Asn His Val Tyr 105 Phe Asn Leu Asp Gly Glu Gln Ser Asp Val Arg Asn His Lys Leu Gln 120 125 Ile Leu Ala Asp Glu Tyr Leu Pro Val Asp Glu Gly Ile Pro His 135 140 Asp Gly Leu Lys Ser Val Ala Gly Thr Ser Phe Asp Phe Arg Ser Ala 155 150 Lys Ile Ile Ala Ser Glu Phe Leu Ala Asp Asp Asp Gln Arg Lys Val 170 ' 175 Lys Gly Tyr Asp His Ala Phe Leu Leu Gln Ala Lys Gly Asp Gly Lys 190 180 185 Lys Val Ala Ala His Val Trp Ser Ala Asp Glu Lys Leu Gln Leu Lys 195 200 Val Tyr Thr 210 211

<210> 938 <211> 118 <212>Amino acid <213> Homo sapiens

<400> 938 Pro Leu Ser Arg Phe Leu Ser Lys Glu Ser Gln Glu Asp Trp Gly Met 10 Glu Arg Gln Ser Arg Val Met Ser Glu Lys Asp Glu Tyr Gln Phe Gln 25 His Gln Gly Ala Val Glu Leu Leu Val Phe Asn Phe Leu Leu Ile Leu 40 Thr Ile Leu Thr Ile Trp Leu Phe Lys Asn His Arg Phe Arg Phe Leu His Glu Thr Gly Gly Ala Met Val Tyr Asp Lys Pro Pro Lys Phe Ala 70 75 Met Ser Arg Glu Gln Met Ser Gln Ser Cys Ser His Thr Ala His Asn 85 Ala Ser Leu Leu Thr Asp Ala Gly Pro Leu Ser Cys Gly Glu Ser Arg 105 100 Ala Ser Cys Leu Phe Leu

<210> 939 <211> 143 <212>Amino acid <213> Homo sapiens

115 118

<400> 939 Asp Ser Lys Glu Pro Arg Leu Gln Gln Leu Gly Leu Leu Glu Glu Glu 10 Gln Leu Arg Gly Leu Gly Phe Arg Gln Thr Arg Gly Tyr Lys Ser Leu Ala Gly Cys Leu Gly His Gly Pro Leu Val Leu Gln Leu Leu Ser Phe Thr Leu Leu Ala Gly Leu Leu Val Gln Val Ser Lys Val Pro Ser Ser 55 Ile Ser Gln Glu Gln Ser Arg Gln Asp Ala Ile Tyr Gln Asn Leu Thr 70 75 Gln Leu Lys Ala Ala Val Gly Glu Leu Ser Glu Lys Ser Lys Leu Gln 90 Glu Ile Tyr Gln Glu Leu Thr Gln Leu Lys Ala Ala Val Gly Glu Leu 105 Pro Glu Lys Ser Lys Leu Gln Glu Ile Tyr Gln Glu Leu Thr Trp Leu 120 Lys Ala Ala Val Gly Glu Leu Pro Glu Lys Ser Lys Met Gln Glu 140

<210> 940 <211> 63 <212>Amino acid <213> Homo sapiens

35 40 45
Asn Pro Asn Gly His Ser Gln Pro Gln Asp Ser Phe Leu Leu *
50 . 55 60 62

<210> 941 <211> 238 <212>Amino acid <213> Homo sapiens

<400> 941 Phe Glu Thr Leu Ser Met Arg Gly Ile Pro His Met Leu Ala Leu Gly 1 5 10 Pro Gln Gln Leu Leu Ala Gln Asp Glu Glu Gly Asp Thr Leu Leu His 20 25 Leu Phe Ala Ala Arg Gly Leu Arg Trp Ala Ala Tyr Ala Ala Glu 40 Val Leu Gln Val Tyr Arg Arg Leu Asp Ile Arg Glu His Lys Gly Lys 55 Thr Pro Leu Leu Val Ala Ala Ala Asn Gln Pro Leu Ile Val Glu 75 65 70 Asp Leu Leu Asn Leu Gly Ala Glu Pro Asn Ala Ala Asp His Gln Gly . 85 90 Arg Ser Val Leu His Val Ala Ala Thr Tyr Gly Leu Pro Gly Val Leu 105 Leu Ala Val Leu Asn Ser Gly Val Gln Val Asp Leu Glu Ala Arg Asp 120 125 Phe Glu Gly Leu Thr Pro Leu His Thr Ala Ile Leu Ala Leu Asn Val 140 Ala Met Arg Pro Ser Asp Leu Cys Pro Arg Val Leu Ser Thr Gln Ala 150 155 Arg Asp Arg Leu Asp Cys Val His Met Leu Leu Gln Met Gly Ala Asn 165 170 His Thr Ile Gln Val Ser Gly Asp Val Gly Gly Gln Thr Leu Gly Asp 185 Cys Val Glu Trp Gly His Leu Asp Val Arg Glu Leu Gln Ala Asn Ala 200 Asp Phe Ala Ser Ser Leu Leu Arg Ala Leu Glu His Val Thr Ser Leu 215 Leu Cys Ala Leu Arg Val Phe Cys Leu Phe Leu Cys Gln Leu 235

<210> 942 <211> 158 <212>Amino acid <213> Homo sapiens

55 60 Lys Val Val Glu Arg Glu Leu Asp Ala Leu Leu Glu Gln Gln Asn Thr 70 75 Ile Glu Ser Lys Met Val Thr Leu His Arg Met Gly Pro Asn Leu Gln Leu Ile Glu Gly Asp Ala Lys Gln Leu Ala Gly Met Ile Thr Phe Thr 105 Cys Asn Leu Ala Glu Asn Val Ser Ser Lys Val Arg Gln Leu Asp Leu 120 125 Ala Lys Asn Arg Leu Tyr Gln Ala Ile Gln Arg Ala Asp Asp Ile Leu 135 140 Asp Leu Lys Phe Cys Met Asp Gly Val Gln Thr Ala Leu Arg 150

<210> 943 <211> 235 <212>Amino acid <213> Homo sapiens

<400> 943 Ala Val Glu Phe Arg Val Pro Arg Ser Gly Ser Ala Tyr Leu Tyr Ser 10 Tyr Val Thr Val Gly Glu Leu Trp Ala Phe Thr Thr Gly Trp Asn Leu 25 Ile Leu Ser Tyr Val Ile Gly Thr Ala Ser Val Ala Arg Ala Trp Ser 40 Ser Ala Phe Asp Asn Leu Ile Gly Asn His Ile Ser Lys Thr Leu Gln Gly Ser Ile Ala Leu His Val Pro His Val Leu Ala Glu Tyr Pro Asp . 70 Phe Phe Ala Leu Gly Leu Val Leu Leu Leu Thr Gly Leu Leu Ala Leu 85 90 Gly Ala Ser Glu Ser Ala Leu Val Thr Lys Val Phe Thr Gly Val Asn 100 105 Leu Leu Val Leu Gly Phe Val Met Ile Ser Gly Phe Val Lys Gly Asp 120 125 Val His Asn Trp Lys Leu Thr Glu Glu Asp Tyr Glu Leu Ala Met Ala 135 140 Glu Leu Asn Asp Thr Tyr Ser Leu Gly Pro Leu Gly Ser Gly Gly Phe 155 150 Val Pro Phe Gly Phe Glu Gly Ile Leu Arg Gly Ala Ala Thr Cys Phe 170 175 Tyr Ala Phe Val Gly Phe Asp Cys Ile Ala Thr Thr Gly Glu Glu Ala 180 185 190 Gln Asn Pro Gln Arg Ser Ile Pro Met Gly Ile Gly Ile Ser Leu Ser 200 Val Cys Phe Leu Ala Asp Phe Ala Val Ser Ser Ala Leu Thr Leu Met 215 Met Pro Tyr Tyr Gln Leu Gln Pro Glu Ser Pro 230

<210> 944 <211> 284 <212>Amino acid <213> Homo sapiens

<400> 944 Gly Phe His Pro Asn Thr Thr His Tyr Arg Ala Arg Ala Ala Arg 10 Ala Gly Ala Gly Ser Phe Val Gly Glu Val Ser Ala Val Asp Lys Asp Phe Gly Pro Asn Gly Glu Val Arg Tyr Ser Phe Glu Met Val Gln Pro Asp Phe Glu Leu His Ala Ile Ser Gly Glu Ile Thr Asn Thr His Gln Phe Asp Arg Glu Ser Leu Met Arg Arg Gly Thr Ala Val Phe Ser · 70 Phe Thr Val Ile Ala Thr Asp Gln Gly Ile Pro Gln Pro Leu Lys Asp Gln Ala Thr Val His Val Tyr Met Lys Asp Ile Asn Asp Asn Ala Pro 100 105 Lys Phe Leu Lys Asp Phe Tyr Gln Ala Thr Ile Ser Glu Ser Ala Ala 120 125 Asn Leu Thr Gln Val Leu Arg Val Ser Ala Ser Asp Val Asp Glu Gly 135 Asn Asn Gly Leu Ile His Tyr Ser Ile Ile Lys Gly Asn Glu Glu Arg 150 155 Gln Phe Ala Ile Asp Ser Thr Ser Gly Gln Val Thr Leu Ile Gly Lys 165 170 Leu Asp Tyr Glu Ala Thr Pro Ala Tyr Ser Leu Val Ile Gln Ala Val 180 185 190 Asp Ser Gly Thr Ile Pro Leu Asn Ser Thr Cys Thr Leu Asn Ile Asp 200 Ile Leu Asp Glu Asn Asp Asn Thr Pro Phe Phe Leu Leu Asn Gln His 215 Phe Phe Val Asp Val Leu Glu Asn Met Arg Ile Gly Glu Leu Gly Ala 230 235 Ser Gly Thr Ala Thr Asp Ser Asp Ser Gly Asp Ile Ala Asp Leu Tyr 250 Tyr Lys Phe Thr Gly Thr Lys His Pro Pro Gly Thr Phe Ser Ile Ser 265 Pro Lys His Leu Gly Val Phe Phe Leu Ala Gln Lys 280

<210> 945 <211> 119 <212>Amino acid <213> Homo sapiens

100 105 110 Ile His Cys Gln Glu Leu Lys 115 119

<210> 946 <211> 166 <212>Amino acid <213> Homo sapiens

<400> 946 Ile Asp Ser Gly Asn Gln Asn Gly Gly Asn Asp Asp Lys Thr Lys Asn 10 Ala Glu Arg Asn Tyr Leu Asn Val Leu Pro Gly Glu Phe Tyr Ile Thr 20 25 Arg His Ser Asn Leu Ser Glu Ile His Val Ala Phe His Leu Cys Val 40 Asp Asp His Val Lys Ser Gly Asn Ile Thr Ala Arg Asp Pro Ala Ile Met Gly Leu Arg Asn Ile Leu Lys Val Cys Cys Thr His Asp Ile Thr 70 Thr Ile Ser Ile Pro Leu Leu Leu Val His Asp Met Ser Glu Glu Met 85 90 Thr Ile Pro Trp Cys Leu Arg Arg Ala Glu Leu Val Phe Lys Cys Val 100 105 Lys Gly Phe Met Met Glu Met Ala Ser Trp Asp Gly Gly Ile Ser Arg 120 125 Thr Val Gln Phe Leu Val Pro Gln Ser Ile Ser Glu Glu Met Phe Tyr 135 140 Gln Leu Ser Asn Met Leu Pro Gln Ile Phe Arg Val Ser Ser Thr Leu 150 155 Thr Leu Thr Ser Lys His 165 166

<210> 947 <211> 121 <212>Amino acid <213> Homo sapiens

·<400> 947 Ser Ile Leu Pro Ala Leu Leu Val Thr Ile Leu Ile Phe Met Asp Gln 1 5 10 Gln Ile Thr Ala Val Ile Val Asn Arg Lys Glu Asn Lys Leu Lys Lys 20、 25 Ala Ala Gly Tyr His Leu Asp Leu Phe Trp Val Gly Ile Leu Met Ala 35 40 Leu Cys Ser Phe Met Gly Leu Pro Trp Tyr Val Ala Ala Thr Val Ile Ser Ile Ala His Ile Asp Ser Leu Lys Met Glu Thr Glu Thr Ser Ala 70 75 Pro Gly Glu Gln Pro Gln Phe Leu Gly Val Arg Glu Gln Arg Val Thr 85 90 Gly Ile Ile Val Phe Ile Leu Thr Gly Ile Ser Val Phe Leu Ala Pro Ile Leu Lys Cys Ile Pro Leu Pro Val

115 120 121

<210> 948 <211> 191 <212>Amino acid <213> Homo sapiens

<400> 948 Gly Ala Ser Arg Val Glu Ala Gly Ser Ala Asn Gly Met Leu Ile Asp Gly Gly Ser Gln Ile Val Lys Val Gln Gly His Ala Asp Gly Thr Thr Ile Asn Lys Ser Gly Ser Gln Asp Val Val Gln Gly Ser Leu Ala Thr Asn Thr Thr Ile Asn Gly Gly Arg Gln Tyr Val Glu Gln Ser Thr Val Glu Thr Thr Thr Ile Lys Asn Gly Glu Gln Arg Val Tyr Glu Ser 70 Arg Ala Leu Asp Thr Thr Ile Glu Gly Gly Thr Gln Ser Leu Asn Ser 90 Lys Ser Thr Ala Lys Asn Thr His Ile Tyr Ser Gly Gly Thr Gln Ile 100 105 Val Asp Asn Thr Ser Thr Ser Asp Val Ile Glu Val Tyr Ser Gly Gly 125 120 Val Leu Asp Val Arg Gly Gly Thr Ala Thr Asn Val Thr Gln His Asp 130 135 Gly Ala Ile Leu Lys Thr Asn Thr Asn Gly Thr Thr Val Ser Gly Thr 150 155 Asn Ser Glu Gly Ala Phe Ser Ile His Asn His Val Ala Asp Asn Val 170 Leu Leu Glu Asn Gly Gly His Leu Asp Ile Asn Ala Tyr Gly Ser 185

<210> 949 <211> 98 <212>Amino acid <213> Homo sapiens

<400> 949 Phe Phe Ser Ser Ile Gln Leu Thr Asp Asp Gln Gly Pro Val Leu Met 10 Thr Thr Val Ala Met Pro Val Phe Ser Lys Gln Asn Glu Thr Arg Ser 25 Lys Gly Ile Leu Leu Gly Val Val Gly Thr Asp Val Pro Val Lys Glu 40 Leu Leu Lys Thr Ile Pro Lys Tyr Lys Val Met Asn Asp Leu Ile Pro 55 60 Glu Ile Lys Ala Thr Glu Met Pro Arg Ala Leu Phe Ser Gln Ser Ser 70 75 Gly Phe Lys Leu Tyr Phe Gly Ala Met Phe Leu Leu Thr Thr Ile Thr Ala Cys 98

<210> 950 <211> 196 <212>Amino acid <213> Homo sapiens

<400> 950 Ser Cys Ser Gly Thr Gly Thr Asn Ala Cys Tyr Met Glu Asp Met Ser 5 10 Asn Ile Asp Leu Val Glu Gly Asp Glu Gly Arg Met Cys Ile Asn Thr 25 Glu Trp Gly Ala Phe Gly Asp Asp Gly Ala Leu Glu Asp Ile Arg Thr 40 Glu Phe Asp Arg Glu Leu Asp Leu Gly Ser Leu Asn Pro Gly Lys Gln 55 Leu Phe Glu Lys Met Ile Ser Gly Leu Tyr Leu Gly Glu Leu Val Arg 70 75 Leu Ile Leu Leu Lys Met Ala Lys Ala Gly Leu Leu Phe Gly Gly Glu 90 Lys Ser Ser Ala Leu His Thr Lys Gly Lys Ile Glu Thr Arg His Val 100 105 Ala Ala Met Glu Lys Tyr Lys Glu Gly Leu Ala Asn Thr Arg Glu Ile 120 125 Leu Val Asp Leu Gly Leu Glu Pro Ser Glu Ala Asp Cys Ile Ala Val 135 140 Gln His Val Cys Thr Ile Val Ser Phe Arg Ser Ala Asn Leu Cys Ala 150 155 Ala Ala Leu Ala Ala Ile Leu Thr Arg Leu Arg Glu Asn Lys Lys Val 165 170 Glu Arg Leu Arg Thr Thr Val Gly Met Asp Gly Thr Leu Tyr Lys Ile 180 185 His Pro Gln Tyr 195 196

<210> 951 <211> 721 <212>Amino acid <213> Homo sapiens

120 Ala Phe Asp Pro Pro Asn Phe Pro Ile Cys Leu Leu Gly Asn Arg Thr 135 Leu Ser Arg His Gly Phe Asp Val Cys Ala Lys Leu Ala Trp Glu Gly 150 155 Asn Glu Thr Val Thr Thr Arg Leu Trp Gly Leu Phe Cys Ser Ser Arg 170 . 165 Phe Leu Asn Ala Thr Cys Asp Glu Tyr Phe Thr Arg Asn Asn Val Thr 185 Glu Ile Gln Gly Ile Pro Gly Ala Ala Ser Gly Leu Ile Lys Glu Asn 200 Leu Trp Ser Ser Tyr Leu Thr Lys Gly Val Ile Val Glu Arg Ser Gly 215 220 Met Thr Ser Val Gly Leu Ala Asp Gly Thr Pro Ile Asp Met Asp His 235 230 Pro Tyr Val Phe Ser Asp Met Thr Ser Tyr Phe Thr Leu Leu Val Gly 245 250 255 Ile Tyr Phe Pro Ser Val Thr Gly Ile Met Ala Gly Ser Asn Arg Ser 265 Gly Asp Leu Arg Asp Ala Gln Lys Ser Ile Pro Thr Gly Thr Ile Leu 280 Ala Ile Ala Thr Thr Ser Ala Val Tyr Ile Ser Ser Val Val Leu Phe 295 300 Gly Ala Cys Ile Glu Gly Val Val Leu Arg Asp Lys Phe Gly Glu Ala 310 315 Val Asn Gly Asn Leu Val Val Gly Thr Leu Ala Trp Pro Ser Pro Trp 325 Val Ile Val Ile Gly Ser Phe Phe Ser Thr Cys Gly Ala Gly Leu Gln 340 345 Ser Leu Thr Gly Ala Pro Arg Leu Leu Gln Ala Ile Ser Arg Asp Gly 360 Ile Val Pro Phe Leu Gln Val Phe Gly His Gly Lys Ala Asn Gly Glu 370 375 380 Pro Thr Trp Ala Leu Leu Thr Ala Cys Ile Cys Glu Ile Gly Ile 390 · 395 Leu Ile Ala Ser Leu Asp Glu Val Ala Pro Ile Leu Ser Met Phe Phe 410 Leu Met Cys Tyr Met Phe Val Asn Leu Ala Cys Ala Val Gln Thr Leu 420 425 Leu Arg Thr Pro Asn Trp Arg Pro Arg Phe Arg Tyr Tyr His Trp Thr 440 445 Leu Ser Phe Leu Gly Met Ser Leu Cys Leu Ala Leu Met Phe Ile Cys 455 Ser Trp Tyr Tyr Ala Leu Val Ala Met Leu Ile Ala Gly Leu Ile Tyr 470 475 Lys Tyr Ile Glu Tyr Arg Gly Ala Lys Lys Glu Trp Gly Asp Gly Ile 485 490 Arg Gly Leu Ser Leu Ser Ala Ala Arg Tyr Ala Leu Leu Arg Leu Glu 505 Glu Gly Pro Pro His Thr Lys Asn Trp Arg Pro Gln Leu Leu Val Leu 520 525 . Val Arg Val Asp Gln Asp Gln Asn Val Val His Pro Gln Leu Leu Ser 535 Leu Thr Ser Gln Leu Lys Ala Gly Lys Gly Leu Thr Ile Val Gly Ser 550 555 Val Leu Glu Gly Thr Phe Leu Glu Asn His Pro Gln Ala Gln Arg Ala 570 Glu Glu Ser Ile Arg Arg Leu Met Glu Ala Glu Lys Val Lys Gly Phe 585 Cys Gln Val Val Ile Ser Ser Asn Leu Arg Asp Gly Val Ser His Leu 600 605 Ile Gln Ser Gly Gly Leu Gly Gly Leu Gln His Asn Thr Val Leu Val 615 · 620 Gly Trp Pro Arg Asn Trp Arg Gln Lys Glu Asp His Gln Thr Trp Arg

630 635 Asn Phe Ile Glu Leu Val Arg Glu Thr Thr Ala Gly His Leu Ala Leu 645 650 Leu Val Thr Lys Asn Val Ser Met Phe Pro Gly Asn Pro Glu Arg Phe 660 665 Ser Glu Gly Ser Ile Asp Arg Trp Gly Ile Gly His Asp Gly Gly Met 680 685 Leu Met Leu Val Pro Phe Leu Leu Arg His His Lys Val Trp Arg Lys 695 700 Cys Lys Met Arg Ile Phe Thr Val Ala Gln Met Val Asp Met His Ala Met 721

<210> 952 <211> 42 <212>Amino acid <213> Homo sapiens

<210> 953 <211> 80 <212>Amino acid <213> Homo sapiens

<210> 954 <211> 202 <212>Amino acid <213> Homo sapiens

<400> 954 Cys Gly Thr Leu Ile Leu Gln Ala Arg Ala Tyr Val Gly Pro His Val 10 Leu Ala Val Val Thr Arg Thr Gly Phe Cys Thr Ala Lys Gly Gly Leu 25 Val Ser Ser Ile Leu His Pro Arg Pro Ile Asn Phe Lys Phe Tyr Lys 40 His Ser Met Lys Phe Val Ala Ala Leu Ser Val Leu Ala Leu Leu Gly Thr Ile Tyr Ser Ile Phe Ile Leu Tyr Arg Asn Arg Val Pro Leu Asn Glu Ile Val Ile Arg Ala Leu Asp Leu Val Thr Val Val Val Pro Pro 85 Ala Leu Pro Ala Ala Met Thr Val Cys Thr Leu Tyr Ala Gln Ser Arg 105 Leu Arg Arg Gln Gly Ile Phe Cys Ile His Pro Leu Arg Ile Asn Leu 120 115 Gly Gly Lys Leu Gln Leu Val Cys Phe Asp Lys Thr Gly Thr Leu Thr 130 - 135 Glu Asp Gly Leu Asp Val Met Gly Val Val Pro Leu Lys Gly Gln Ala 150 155 Phe Leu Pro Leu Val Pro Glu Pro Arg Arg Leu Pro Val Gly Pro Leu 165 170 Leu Arg Ala Leu Ala Thr Cys His Ala Leu Ser Arg Leu Gln Asp Thr 185 Pro Val Gly Asp Pro Met Asp Leu Lys Met 200

<210> 955 <211> 188 <212>Amino acid <213> Homo sapiens

<400> 955 Gln Ile Glu Tyr Phe Arg Ser Leu Leu Asp Glu His His Ile Ser Tyr 10 Val Ile Asp Glu Asp Val Lys Ser Gly Arg Tyr Met Glu Leu Glu Gln 25 Arg Tyr Met Asp Leu Ala Glu Asn Ala Arg Phe Glu Arg Glu Gln Leu 40 Leu Gly Val Gln Gln His Leu Ser Asn Thr Leu Lys Met Ala Glu Gln 55 Asp Asn Lys Glu Ala Gln Glu Met Ile Gly Ala Leu Lys Glu Arg Ser 70 75 His His Met Glu Arg Ile Ile Glu Ser Glu Gln Lys Gly Lys Ala Ala 90 Leu Ala Ala Thr Leu Glu Glu Tyr Lys Ala Thr Val Ala Ser Asp Gln 105 Ile Glu Met Asn Arg Leu Lys Ala Gln Leu Glu Asn Glu Lys Gln Lys 120 Val Ala Glu Leu Tyr Ser Ile His Asn Ser Gly Asp Lys Ser Asp Ile 135 140 Gln Asp Leu Leu Glu Ser Val Arg Leu Asp Lys Glu Lys Ala Glu Thr 150 155 Leu Ala Ser Ser Leu Gln Glu Asp Leu Ala His Thr Arg Asn Asp Ala 165 170 Asn Arg Leu Gln Asp Ala Ile Ala Lys Gly Arg Gly

180 185 188

<210> 956 <211> 132 <212>Amino acid <213> Homo sapiens

<400> 956 Ala Arg Tyr Arg Phe Thr Leu Ser Ala Arg Thr Gln Val Gly Ser Gly 10 Glu Ala Val Thr Glu Glu Ser Pro Ala Pro Pro Asn Glu Ala Thr Pro Thr Ala Ala Pro Pro Thr Leu Pro Pro Thr Thr Val Gly Ala Thr Gly 40 Ala Val Ser Ser Thr Asp Ala Thr Ala Ile Ala Ala Thr Thr Glu Ala 55 Thr Thr Val Pro Ile Ile Pro Thr Val Ala Pro Thr Thr Met Ala Thr 70 Thr Thr Thr Val Ala Thr Thr Thr Thr Thr Ala Ala Ala Thr Thr 85 90 Thr Thr Glu Ser Pro Pro Thr Thr Thr Ser Gly Thr Lys Ile His Glu 105 110 Ser Ala Pro Asp Glu Gln Ser Ile Trp Asn Val Thr Val Leu Pro Asn 120 125 Ser Lys Trp Ala 130 132

<210> 957 <211> 220 <212>Amino acid <213> Homo sapiens

<400> 957 Leu Lys Ser Thr Gln Asp Glu Ile Asn Gln Ala Arg Ser Lys Leu Ser 1 5 10 Gln Leu His Glu Ser Arg Gln Glu Ala His Arg Ser Leu Glu Gln Tyr 25 Asp Gln Val Leu Asp Gly Ala His Gly Ala Ser Leu Thr Asp Leu Ala · 35 Asn Leu Ser Glu Gly Val Ser Leu Ala Glu Arg Gly Ser Phe Gly Ala 60 Met Asp Asp Pro Phe Lys Asn Lys Ala Leu Leu Phe Ser Asn Asn Thr 70 75 80 Gln Glu Leu His Pro Asp Pro Phe Gln Thr Glu Asp Pro Phe Lys Ser 85 90 Asp Pro Phe Lys Gly Ala Asp Pro Phe Lys Gly Asp Pro Phe Gln Asn 105 Asp Pro Phe Ala Glu Gln Gln Thr Thr Ser Thr Asp Pro Phe Gly Gly 120 125 Asp Pro Phe Lys Glu Ser Asp Pro Phe Arg Gly Ser Ala Thr Asp Asp 135 140 Phe Phe Lys Lys Gln Thr Lys Asn Asp Pro Phe Thr Ser Asp Pro Phe 150 155 Thr Lys Asn Pro Ser Leu Pro Ser Lys Leu Asp Pro Phe Glu Ser Ser

<210> 958 <211> 250 <212>Amino acid <213> Homo sapiens

<400> 958 Arg Thr Arg Gly Gly Ser Gly Asn Ser Ser Gln Pro Ser Leu Arg Glu 10 Gly His Asp Lys Pro Val Phe Asn Gly Ala Gly Lys Pro His Ser Ser 25 Thr Ser Ser Pro Ser Val Pro Lys Thr Ser Ala Ser Arg Thr Gln Lys 40 Ser Ala Val Glu His Lys Ala Lys Lys Ser Leu Ser His Pro Ser His Ser Arg Pro Gly Pro Met Val Thr Pro His Asn Lys Ala Lys Ser Pro Gly Val Arg Gln Pro Gly Ser Ser Ser Ser Ala Pro Gly Gln Pro 90 Ser Thr Gly Val Ala Arg Pro Thr Val Ser Ser Gly Pro Val Pro Arg 100 105 Arg Gln Asn Gly Ser Ser Ser Gly Pro Glu Arg Ser Ile Ser Gly 120 Ser Lys Lys Pro Thr Asn Asp Ser Asn Pro Ser Arg Arg Thr Val Ser 130 135 140 Gly Thr Cys Gly Pro Gly Gln Pro Ala Ser Ser Ser Gly Gly Pro Gly 150 155 Arg Pro Ile Ser Gly Ser Val Ser Ser Ala Arg Pro Leu Gly Ser Ser 170 Arg Gly Pro Gly Arg Pro Val Ser Ser Pro His Glu Leu Arg Arg Pro 180 185 Val Ser Gly Leu Gly Pro Pro Gly Arg Ser Val Ser Gly Pro Gly Arg 200 Ser Ile Ser Gly Ser Ile Pro Ala Gly Arg Thr Val Ser Asn Ser Val 215 220 Pro Gly Arg Pro Val Ser Ser Leu Gly Pro Gly Gln Thr Val Ser Ser 230 235 Ser Gly Pro Thr Ile Lys Pro Lys Cys Thr 245

<210> 959 <211> 48 <212>Amino acid <213> Homo sapiens

 $<\!\!400\!\!>959$ Arg Gly Lys Gly Ile Thr Pro Arg Tyr His Leu Cys Ile Ser Asp Pro

1 Solution 15 Solution 17 Solution 17 Solution 17 Solution 18 Solution 18 Solution 19 Sol

<210> 960 <211> 63 <212>Amino acid <213> Homo sapiens

<210> 961 <211> 59 <212>Amino acid <213> Homo sapiens

<210> 962 <211> 140 <212>Amino acid <213> Homo sapiens

40 Ala Leu Thr Glu Glu Leu Ile Trp Ser Pro Asp Ile Gly Asp Thr Gln 55 Leu Asp Val Glu Phe Leu Met Glu Leu Leu Asp Pro Asp Glu Leu Arg 75 70 Gly Glu Ala Gly Tyr Tyr Leu Thr Thr Trp Phe Gly Ala Leu His His 90 Ile Ala His Tyr Gln Pro Glu Thr Asp Arg Ala Pro Arg Gly Leu Ser 100 105 110 Ser Glu Ala Arg Ala Ser Leu His Gln Trp His Arg Arg Arg Thr Leu 120 His Arg Lys Asp His Pro Arg Ala Gln Gln Leu Asp 135

<210> 963 <211> 153 <212>Amino acid <213> Homo sapiens

<400> 963 Phe Trp Met Asp Pro Tyr Asn Pro Leu Asn Phe Lys Ala Pro Phe Gln 5 10 Thr Ser Gly Glu Asn Glu Lys Gly Cys Arg Asp Ser Lys Thr Pro Ser 20 25 Glu Ser Ile Val Ala Ile Ser Glu Cys His Thr Leu Leu Ser Cys Lys 40 Val Gln Leu Leu Gly Ser Gln Glu Ser Glu Cys Pro Asp Ser Val Gln 55 Arg Asp Val Leu Ser Gly Gly Arg His Thr His Val Lys Arg Lys Lys 70 75 Val Thr Phe Leu Glu Glu Val Thr Glu Tyr Tyr Ile Ser Gly Asp Glu 90 Asp Arg Lys Gly Pro Trp Glu Glu Phe Ala Arg Asp Gly Cys Arg Phe 105 Gln Lys Arg Ile Gln Glu Thr Glu Asp Ala Ile Gly Tyr Cys Leu Thr 120 125 Phe Glu His Arg Glu Arg Met Phe Asn Arg Leu Gln Gly Thr Cys Phe 135 Lys Gly Leu Asn Val Leu Lys Gln Cys 145 150

<210> 964 <211> 54 <212>Amino acid <213> Homo sapiens

50 54

<210> 965 <211> 39 <212>Amino acid <213> Homo sapiens

<210> 966 <211> 130 <212>Amino acid <213> Homo sapiens

<400> 966 Gly Ser Glu Cys Gln Gly Thr Asp Leu Asp Thr Arg Asn Cys Thr Ser Asp Leu Cys Val His Thr Ala Ser Gly Pro Glu Asp Val Ala Leu Tyr Val Gly Leu Ile Ala Val Ala Val Cys Leu Val Leu Leu Leu Val Leu Ile Leu Val Tyr Cys Arg Lys Lys Glu Gly Leu Asp Ser Asp Val 55 Ala Asp Ser Ser Ile Leu Thr Ser Gly Phe Gln Pro Val Ser Ile Lys 75 Pro Ser Lys Ala Asp Asn Pro His Leu Leu Thr Ile Gln Pro Asp Leu 85 90 Ser Thr Thr Thr Thr Tyr Gln Gly Ser Leu Cys Pro Arg Gln Asp 105 Gly Pro Ser Pro Lys Phe Gln Leu Thr Asn Gly His Leu Leu Ser Pro 120 Leu Gly 130

<210> 967 <211> 259 <212>Amino acid <213> Homo sapiens

20 25 Asp Glu Trp Thr Ile Asn Ile Leu Gln Ser Phe His Asn Val Gln Gln 40 Met Ala Ile Asp Trp Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val 55 Gly Asp Arg Ile Phe Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr 70 Leu Ile Asp Leu Glu Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro 90 Ile Ala Gly Lys Leu Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val 100 105 Glu Arg Cys Asp Met Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser 120 125 Lys Thr Glu Gln Pro Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu 135 Val Tyr Trp Val Asp Leu Tyr Leu Asp Tyr Val Gly Val Val Asp Tyr 150 155 Gln Gly Lys Asn Arg His Ala Val Ile Gln Gly Arg Gln Val Arg His 165 170 Leu Tyr Gly Ile Thr Val Phe Glu Asp Tyr Leu Tyr Ala Thr Asn Ser 185 Asp Ser Tyr Asn Ile Val Arg Ile Ser Arg Phe Asn Gly Thr Asp Ile 195 200 His Ser Leu Ile Lys Ile Glu Asn Ala Trp Gly Ile Arg Ile Tyr Gln 215 220 Lys Arg Thr Gln Pro Thr Val Arg Ser His Ala Cys Glu Val Asp Pro 230 235 Tyr Gly Met Pro Gly Gly Cys Ser His Ile Cys Leu Leu Ser Ser Ser 250 Tyr Thr Lys .259

<210> 968 <211> 161 <212>Amino acid <213> Homo sapiens

<400> 968 Ser Ser Gly Asn Pro Gln Pro Gly Asp Ser Ser Gly Gly Gly Ala Gly 1 5 Gly Gly Leu Pro Ser Pro Gly Glu Gln Glu Leu Ser Arg Arg Leu Gln 20 25 Arg Leu Tyr Pro Ala Val Asn Gln Gln Glu Thr Pro Leu Pro Arg Ser 35 Trp Ser Pro Lys Asp Lys Tyr Asn Tyr Ile Gly Leu Ser Gln Gly Asn 55 Leu Arg Val His Tyr Lys Gly His Gly Lys Asn His Lys Asp Ala Ala 70 Ser Val Arg Ala Thr His Pro Ile Pro Ala Ala Cys Gly Ile Tyr Tyr 90 Phe Glu Val Lys Ile Val Ser Lys Gly Arg Asp Gly Tyr Met Gly Ile 105 Gly Leu Ser Ala Gln Gly Val Asn Met Asn Arg Leu Pro Gly Trp Asp 120 Lys His Ser Tyr Gly Tyr His Gly Asp Asp Gly His Ser Phe Cys Ser 135 Ser Gly Thr Gly Gln Pro Tyr Gly Pro Thr Phe Thr Thr Gly Asp Val 155 Ile

161

<210> 969 <211> 76 <212>Amino acid <213> Homo sapiens

<210> 970

<211> 267
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(267)
<223> X = any amino acid or stop code

<400> 970 Gln Leu Ser Leu Ala Arg Gly Lys Val Phe Leu Cys Ala Leu Ser Phe Val Tyr Phe Ala Lys Ala Leu Ala Glu Gly Tyr Leu Lys Ser Thr Ile Thr Gln Ile Glu Arg Arg Val Asp Ile Pro Ser Ser Leu Val Gly Val 40 Ile Asp Gly Ser Phe Glu Ile Gly Asn Leu Leu Val Ile Thr Phe Val 55 Ser Tyr Phe Gly Ala Lys Leu His Arg Pro Lys Ile Ile Gly Ala Gly 70 75 Cys Val Ile Met Gly Val Gly Thr Leu Leu Ile Ala Met Pro Gln Phe 90 Phe Met Glu Gln Tyr Lys Tyr Glu Arg Tyr Ser Pro Ser Ser Asn Ser 105 110 Thr Leu Ser Ile Ser Pro Cys Leu Leu Glu Ser Ser Ser Gln Leu Pro 120 125 Val Ser Val Met Glu Lys Ser Lys Ser Lys Ile Ser Asn Glu Cys Glu 135 140 Val Asp Thr Ser Ser Ser Met Trp Ile Tyr Val Phe Leu Gly Asn Leu 150 155 Leu Arg Gly Ile Gly Glu Thr Pro Ile Gln Pro Leu Gly Ile Ala Tyr 165 170 Leu Asp Asp Phe Ala Ser Glu Asp Asn Ala Ala Phe Tyr Ile Gly Cys 180 185

<210> 971 <211> 282 <212>Amino acid <213> Homo sapiens

<400> 971 Gln Pro Ala Gly Arg Val Glu Ala Phe Cys Lys Phe His Met Trp Ala Glu Gly Met Thr Ser Leu Met Lys Ala Ala Leu Asp Leu Thr Tyr Pro 25 Ile Thr Ser Met Phe Ser Gly Ala Gly Phe Asn Ser Ser Ile Phe Ser 40 Val Phe Lys Asp Gln Gln Ile Glu Asp Leu Trp Ile Pro Tyr Phe Ala 55 60 Ile Thr Thr Asp Ile Thr Ala Ser Ala Met Arg Val His Thr Asp Gly 70 75 Ser Leu Trp Arg Tyr Val Arg Ala Ser Met Ser Leu Ser Gly Tyr Met 85 90 Pro Pro Leu Cys Asp Pro Lys Asp Gly His Leu Leu Met Asp Gly Gly 105 Tyr Ile Asn Asn Leu Pro Ala Asp Val Ala Arg Ser Met Gly Ala Lys 120 Val Val Ile Ala Ile Asp Val Gly Ser Arg Asp Glu Thr Asp Leu Thr 135 140 Asn Tyr Gly Asp Ala Leu Ser Gly Trp Trp Leu Leu Trp Lys Arg Trp 150 155 Asn Pro Leu Ala Thr Lys Val Lys Val Leu Asn Met Ala Glu Ile Gln 170 Thr Arg Leu Ala Tyr Val Cys Cys Val Arg Gln Leu Glu Val Val Lys 185 Ser Ser Asp Tyr Cys Glu Tyr Leu Arg Pro Pro Ile Asp Ser Tyr Ser 200 . Thr Leu Asp Phe Gly Lys Phe Asn Glu Ile Cys Glu Val Gly Tyr Gln 215 220 His Gly Arg Thr Val Phe Asp Ile Trp Gly Arg Ser Gly Val Leu Glu 230 235 Lys Met Leu Arg Asp Gln Gln Gly Pro Ser Lys Lys Pro Ala Ser Ala 245 250 Val Leu Thr Cys Pro Asn Ala Ser Phe Thr Asp Leu Ala Glu Ile Val 260 265 Ser Arg Ile Glu Pro Ala Lys Pro Ala Met 280 282

<210> 972 <211> 167 <212>Amino acid <213> Homo sapiens

<400> 972 Leu Trp Val Ile Met Phe Val Ser Tyr Leu Ile Leu Thr Leu Leu His 10 Val Gln Thr Ala Val Leu Ala Arg Pro Gly Gly Glu Ser Ile Gly Cys 20 25 Asp Asp Tyr Leu Gly Ser Asp Lys Val Val Asp Lys Cys Gly Val Cys 40 Gly Gly Asp Asn Thr Gly Cys Gln Val Val Ser Gly Val Phe Lys His 55 Ala Leu Thr Ser Leu Gly Tyr His Arg Val Val Glu Ile Pro Glu Gly 70 75 Ala Thr Lys Ile Asn Ile Thr Glu Met Tyr Lys Ser Asn Asn Tyr Leu 90 Ala Leu Arg Ser Arg Ser Gly Arg Ser Ile Ile Asn Gly Asn Trp Ala 105 Ile Asp Arg Pro Gly Lys Tyr Glu Gly Gly Gly Thr Met Phe Thr Tyr 115 120 Lys Arg Pro Asn Glu Ile Ser Ser Thr Ala Gly Glu Ser Phe Leu Ala 130 135 140 Glu Gly Pro Thr Asn Glu Ile Leu Asp Val Tyr Val Ser Leu Asp Val 150 155 Ser Gly Leu Phe Phe Gly Phe 165 167

<210> 973 <211> 140 <212>Amino acid <213> Homo sapiens

<400> 973 Ile Ser Gly Gly Thr Arg Ser Ala Gly Pro Leu Arg Arg Asn Tyr Asn Phe Ile Ala Ala Val Val Glu Lys Val Ala Pro Ser Val Val His Val 25 Gln Leu Trp Gly Arg Asn Gln Gln Trp Ile Glu Val Val Leu Gln Asn 40 Gly Ala Arg Tyr Glu Ala Val Val Lys Asp Ile Asp Leu Lys Leu Asp 55 Leu Ala Val Ile Lys Ile Glu Ser Asn Ala Glu Leu Pro Val Leu Met 70 75 Leu Gly Arg Ser Ser Asp Leu Arg Ala Gly Glu Phe Val Val Ala Leu 85 90 Gly Ser Pro Phe Ser Leu Gln Asn Thr Ala Thr Ala Gly Ile Val Ser 105 110 Thr Lys Gln Arg Gly Gly Lys Glu Leu Gly Met Lys Asp Ser Asp Met 120 Asp Tyr Val Gln Ile Asp Ala Thr Ile Asn Tyr Gly 135

<210> 974 <211> 286 <212>Amino acid <213> Homo sapiens

<400> 974 Pro Arg Val Arg Glu Leu Lys Glu Ile Leu Asp Arg Lys Gly His Phe Ser Glu Asn Glu Thr Arg Trp Ile Ile Gln Ser Leu Ala Ser Ala Ile 20 25 Ala Tyr Leu His Asn Asn Asp Ile Val His Arg Asp Leu Lys Leu Glu 40 Asn Ile Met Val Lys Ser Ser Leu Ile Asp Asp Asn Asn Glu Ile Asn 55 Leu Asn Ile Lys Val Thr Asp Phe Gly Leu Ala Val Lys Lys Gln Ser 70 Arg Ser Glu Ala Met Leu Gln Ala Thr Cys Gly Thr Pro Ile Tyr Met 85 90 Ala Pro Glu Val Ile Ser Ala His Asp Tyr Ser Gln Gln Cys Asp Ile 105 Trp Ser Ile Gly Val Val Met Tyr Met Leu Leu Arg Gly Glu Pro Pro 120 125 Phe Leu Ala Ser Ser Glu Glu Lys Leu Phe Glu Leu Ile Arg Lys Gly 135 140 Glu Leu His Phe Glu Asn Ala Val Trp Asn Ser Ile Ser Asp Cys Ala 145 . 150 155 Lys Ser Val Leu Lys Gln Leu Met Lys Val Asp Pro Ala His Arg Ile 165 170 Thr Ala Lys Glu Leu Leu Asp Asn Gln Trp Leu Thr Gly Asn Lys Leu 185 Ser Ser Val Arg Pro Thr Asn Val Leu Glu Met Met Lys Glu Trp Lys 200 205 Asn Asn Pro Glu Ser Val Glu Glu Asn Thr Thr Glu Glu Lys Asn Lys 215 Pro Ser Thr Glu Glu Lys Leu Lys Ser Tyr Gln Pro Trp Gly Asn Val 225 . 230 Pro Glu Thr Asn Tyr Thr Ser Asp Glu Glu Glu Glu Lys Gln Val Gly 245 250 Arg Ile Ile Ala Ala Phe Leu Pro Ser Val Lys Tyr Pro His His Thr 260 265 Trp Asn Ile Phe Leu Gln Ile Cys Leu Phe Val Val Ser Leu 280

<210> 975 <211> 155 <212>Amino acid <213> Homo sapiens

<210> 976 <211> 137 <212>Amino acid <213> Homo sapiens

<400> 976 Tyr Asn Gln Lys Val Asp Leu Phe Ser Leu Gly Ile Ile Phe Phe Glu Met Ser Tyr His Pro Met Val Thr Ala Ser Glu Arg Ile Phe Val Leu 20 25 Asn Gln Leu Arg Asp Pro Thr Ser Pro Lys Phe Pro Glu Asp Phe Asp Asp Gly Glu His Ala Lys Gln Lys Ser Val Ile Ser Trp Leu Leu Asn 55 His Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Leu Lys Ser Glu 70 Leu Leu Pro Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu 90 His His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Ile Asp 105 Gly Pro Arg Ser Phe Arg Gln Arg Ile Ser Pro Ala Ile Ala Tyr Thr 120 125 Tyr Asp Ser Asp Ile Leu Lys Gly Asn 130 135

<210> 977 <211> 246 <212>Amino acid <213> Homo sapiens

<400> 977

Ala Ala Thr Glu Val Ser Leu Leu Ala Gly Ser Glu Glu Phe Asn Ala 100 105 Thr Lys Leu Phe Glu Val Asp Thr Asp Ser Cys Glu Arg Trp Met Ser 115 120 125 Cys Lys Ser Glu Phe Leu Lys Lys Tyr Met His Lys Val Met Asn Asp 135 140 Leu Pro Ser Cys Pro Cys Ser Tyr Pro Thr Glu Val Ala Tyr Ser Thr 150 155 Ala Asp Ile Phe Asp Arg Ile Lys Arg Lys Asp Phe Arg Trp Lys Asp 170 Ala Ser Gly Pro Lys Glu Lys Leu Glu Ile Tyr Lys Pro Thr Ala Arg 185 Tyr Cys Ile Arg Ser Met Leu Ser Leu Glu Ser Thr Thr Leu Ala Ala 200 Gln His Cys Cys Tyr Gly Asp Asn Met Gln Leu Ile Thr Arg Gly Lys 215 220 Gly Ala Gly Thr Pro Asn Leu Ile Ser Thr Glu Phe Ser Ala Glu Leu 230 235 His Tyr Lys Val Asp Val 245 246

<210> 978 <211> 203 <212>Amino acid <213> Homo sapiens

<400> 978 Glu Ser Glu Glu Asn Gly Glu Ser Ala Met Asp Ser Thr Val Ala Lys 5 Glu Gly Thr Asn Val Pro Leu Val Ala Ala Gly Pro Cys Asp Asp Glu 20 Gly Ile Val Thr Ser Thr Gly Ala Lys Glu Glu Asp Glu Glu Gly Glu 40 Asp Val Val Thr Ser Thr Gly Arg Gly Asn Glu Ile Gly His Ala Ser 55 Thr Cys Thr Gly Leu Gly Glu Glu Ser Glu Gly Val Leu Ile Cys Glu 70 75 Ser Ala Glu Gly Asp Ser Gln Ile Gly Thr Val Val Glu His Val Glu 90 85 Ala Glu Ala Gly Ala Ala Ile Met Asn Ala Asn Glu Asn Asn Val Asp 105 Ser Met Ser Gly Thr Glu Lys Gly Ser Lys Asp Thr Asp Ile Cys Ser 120 Ser Ala Lys Gly Ile Val Glu Ser Ser Val Thr Ser Ala Val Ser Gly 135 140 Lys Asp Glu Val Thr Pro Val Pro Gly Gly Cys Glu Gly Pro Met Thr 150 155 Ser Ala Ala Ser Asp Gln Ser Asp Ser Gln Leu Glu Lys Val Glu Asp 170 Thr Thr Ile Ser Thr Gly Leu Val Gly Gly Ser Tyr Asp Val Leu Val 185 Ser Gly Glu Val Pro Glu Cys Glu Val Ala His 200

<210> 979 <211> 94 <212>Amino acid <213> Homo sapiens

<210> 980 <211> 226 <212>Amino acid <213> Homo sapiens

<400> 980 Gln His Pro Ser Gln Glu Lys Pro Gln Val Leu Thr Pro Ser Pro Arg Lys Gln Lys Leu Asn Arg Lys Tyr Arg Ser His His Asp Gln Met Ile 25 Cys Lys Cys Leu Ser Leu Ser Ile Ser Tyr Ser Ala Thr Ile Gly Gly 40 Leu Thr Thr Ile Ile Gly Thr Ser Thr Ser Leu Ile Phe Leu Glu His 55 Phe Asn Asn Gln Tyr Pro Ala Ser Glu Val Val Asn Phe Gly Thr Trp 70 75 Phe Leu Phe Ser Phe Pro Ile Ser Leu Ile Met Leu Val Val Ser Trp 90 Phe Trp Met His Trp Leu Phe Leu Gly Cys Asn Phe Lys Glu Thr Cys 105 Ser Leu Ser Lys Lys Lys Thr Lys Arg Glu Gln Leu Ser Glu Lys 120 Arg Ile Gln Glu Glu Tyr Glu Lys Leu Gly Asp Ile Ser Tyr Pro Glu 135 140 Met Val Thr Gly Phe Phe Phe Ile Leu Met Thr Val Leu Trp Phe Thr 150 155 Arg Glu Pro Gly Phe Val Pro Gly Trp Asp Ser Phe Phe Glu Lys Lys 165 170 Gly Tyr Arg Thr Asp Ala Thr Val Ser Val Phe Leu Gly Phe Leu Leu 180 185 Phe Leu Ile Pro Ala Lys Lys Pro Cys Phe Gly Lys Lys Asn Asp Gly 195 200 205 Glu Asn Gln Glu His Ser Leu Gly Thr Glu Pro Ile Ile Thr Trp Lys 215 Asp Phe 225 226

<210> 981 <211> 163

<212>Amino acid <213> Homo sapiens

<400> 981 Leu Glu Arg Glu Gly Asp Lys Gly Thr Pro Val Leu Arg Gly Phe Ser 10 Ser Val Ser Gly Ser Trp Ser Arg Arg Met Pro Pro Phe Leu Leu 25 Thr Cys Leu Phe Ile Thr Gly Thr Ser Val Ser Pro Val Ala Leu Asp 40 Pro Cys Ser Ala Tyr Ile Ser Leu Asn Glu Pro Trp Arg Asn Thr Asp 55 His Gln Leu Asp Glu Ser Gln Gly Pro Pro Leu Cys Asp Asn His Val 70 Asn Gly Glu Trp Tyr His Phe Thr Gly Met Ala Gly Asp Ala Met Pro 90 Thr Phe Cys Ile Pro Glu Asn His Cys Gly Thr His Ala Pro Val Trp 105 Leu Asn Gly Ser His Pro Leu Glu Gly Asp Gly Ile Val Gln Arg Gln 120 Ala Cys Ala Ser Phe Asn Gly Asn Cys Cys Leu Trp Asn Thr Thr Val 135 140 Glu Val Lys Ala Cys Pro Gly Gly Tyr Tyr Val Tyr Arg Leu Thr Lys Pro Ser Val 163

<210> 982 <211> 327 <212>Amino acid <213> Homo sapiens

<400> 982 Cys Gly Arg Thr Met Ser Asp Ile Arg His Ser Leu Leu Arg Arg Asp Ala Leu Ser Ala Ala Lys Glu Val Leu Tyr His Leu Asp Ile Tyr Phe 25 Ser Ser Gln Leu Gln Ser Ala Pro Leu Pro Ile Val Asp Lys Gly Pro 40 Val Glu Leu Leu Glu Glu Phe Val Phe Gln Val Pro Lys Glu Arg Ser 55 Ala Gln Pro Lys Arg Leu Asn Ser Leu Gln Glu Leu Gln Leu Leu Glu 70 Ile Met Cys Asn Tyr Phe Gln Glu Gln Thr Lys Asp Ser Val Arg Gln 90 Ile Ile Phe Ser Ser Leu Phe Ser Pro Gln Gly Asn Lys Ala Asp Asp 105 Ser Arg Met Ser Leu Leu Gly Lys Leu Val Ser Met Ala Val Ala Val 120 Cys Arg Ile Pro Val Leu Glu Cys Ala Ala Ser Trp Leu Gln Arg Thr 135 140 Pro Val Val Tyr Cys Val Arg Leu Ala Lys Ala Leu Val Asp Asp Tyr 150 155 Cys Cys Leu Val Pro Gly Ser Ile Gln Thr Leu Lys Gln Ile Phe Ser 165 170

Ala Ser Pro Arg Phe Cys Cys Gln Phe Ile Thr Ser Val Thr Ala Leu 180 185 Tyr Asp Leu Ser Ser Asp Asp Leu Ile Pro Pro Met Asp Leu Leu Glu 200 205 195 Met Ile Val Thr Trp Ile Phe Glu Asp Pro Arg Leu Ile Leu Ile Thr 215 220 Phe Leu Asn Thr Pro Ile Ala Ala Asn Leu Pro Ile Gly Phe Leu Glu 230 235 Leu Thr Pro Leu Val Gly Leu Ile Arg Trp Cys Val Lys Ala Pro Leu 250 Ala Tyr Lys Arg Lys Lys Pro Pro Leu Ser Asn Gly His Val Ser 265 Asn Lys Val Thr Lys Asp Pro Gly Val Gly Met Asp Arg Asp Ser His 280 Leu Leu Tyr Ser Lys Leu His Leu Ser Val Leu Gln Val Leu Met Thr 295 Leu Gln Leu His Leu Thr Glu Lys Asn Leu Tyr Gly Pro Pro Gly Ala Asp Pro Leu Arg Pro His Gly 325 327

<210> 983 <211> 110 <212>Amino acid <213> Homo sapiens

<210> 984 <211> 80 <212>Amino acid <213> Homo sapiens

Val Gln Val Thr Ser Ala Leu Ala Pro Ile Pro Gly Ser Gly Gly Trp
50
55
60
Gly Gly Gly Arg Arg Gly Ala Gln Leu Thr Ser Gly Trp Thr Leu His
65
70
75
80

<210> 985 <211> 235 <212>Amino acid <213> Homo sapiens

<400> 985 Pro His Ile Ile Gly Ala Glu Asp Asp Phe Gly Thr Glu His Glu 10 Gln Ile Asn Gly Gln Cys Ser Cys Phe Gln Ser Ile Glu Leu Leu Lys 20 25 Ser Arg Pro Ala His Leu Ala Val Phe Leu Arg His Val Val Ser Gln 40 Phe Asp Pro Ala Thr Leu Leu Cys Tyr Leu Tyr Ser Asp Leu Tyr Lys 55 His Thr Asn Ser Lys Glu Thr Arg Arg Ile Phe Leu Glu Phe His Gln 75 Phe Phe Leu Asp Arg Ser Ala His Leu Lys Val Ser Val Pro Asp Glu Met Ser Ala Asp Leu Glu Lys Arg Pro Glu Leu Ile Pro Glu Asp 105 Leu His Arg His Tyr Ile Gln Thr Met Gln Glu Arg Val His Pro Glu 120 Val Gln Arg His Leu Glu Asp Phe Arg Gln Lys Arg Ser Met Gly Leu 135 140 Thr Leu Ala Glu Ser Glu Leu Thr Lys Leu Asp Ala Glu Arg Asp Lys 150 155 Asp Arg Leu Thr Leu Glu Lys Glu Arg Thr Cys Ala Glu Gln Ile Val 165 170 Ala Lys Ile Glu Glu Val Leu Met Thr Ala Gln Ala Val Glu Glu Asp 185 Lys Ser Ser Thr Met Gln Tyr Val Ile Leu Met Tyr Met Lys His Leu 200 Gly Val Lys Val Lys Glu Pro Arg Asn Leu Glu His Lys Arg Gly Arg 215 Ile Gly Phe Leu Pro Lys Ile Lys Gln Ser Met

<210> 986 <211> 140 <212>Amino acid <213> Homo sapiens

 Arg
 Lys
 Ile
 Lys
 Asn
 Glu
 Pro
 Val
 Val
 Phe
 Pro
 Glu
 Gly
 Pro
 Glu
 Ile
 Asp
 Leu
 Ile
 Leu
 Lys
 Met
 Leu
 Asp
 Lys
 Asn
 Pro
 Pro
 Pro
 Ser
 Met
 Leu
 Asp
 Lys
 Asn
 Pro
 Pro
 Pro
 Ser
 Ile
 Lys
 Met
 Leu
 Asp
 Lys
 Asp
 Lys
 Asp
 Lys
 Asp
 Ile
 Ile
 Thr
 Thr
 Thr
 Val
 Thr
 Asp
 Ile
 Lys
 Asp
 Leu
 His
 Pro
 Tr
 Val
 Thr
 Thr
 Thr
 Thr
 Ser
 Val
 Asp
 Ser
 Val
 Asp
 Leu
 Ile
 Pro
 Ile
 Asp
 Leu
 Ile
 Ile
 Ile
 Ile
 Ile
 Ile
 Ile
 Ile
 Il

<210> 987 <211> 242 <212>Amino acid <213> Homo sapiens

<400> 987

His Ala Ser Gly Ile Lys Ile Asp Lys Thr Ser Asp Gly Pro Lys Leu 10 Phe Leu Thr Glu Glu Asp Gln Lys Lys Leu His Asp Phe Glu Glu Gln 25 Cys Val Glu Met Tyr Phe Asn Glu Lys Asp Asp Lys Phe His Ser Gly 40 Ser Glu Glu Arg Ile Arg Val Thr Phe Glu Arg Val Glu Gln Met Cys 55 Ile Gln Ile Lys Glu Val Gly Asp Arg Val Asn Tyr Ile Lys Arg Ser 70 75 Leu Gln Ser Leu Asp Ser Gln Ile Gly His Leu Gln Asp Leu Ser Ala 90 Leu Thr Val Asp Thr Leu Lys Thr Leu Thr Ala Gln Lys Ala Ser Glu 105 Ala Ser Lys Val His Asn Glu Ile Thr Arg Glu Leu Ser Ile Ser Lys 120 His Leu Ala Gln Asn Leu Ile Asp Asp Gly Pro Val Arg Pro Ser Val 135 140 Trp Lys Lys His Gly Val Val Asn Thr Leu Ser Ser Leu Pro Gln 150 155 160 Gly Asp Leu Glu Ser Asn Asn Pro Phe His Cys Asn Ile Leu Met Lys 165 170 Asp Asp Lys Asp Pro Gln Cys Asn Ile Phe Gly Gln Asp Leu Pro Ala 185 Val Pro Gln Arg Lys Glu Phe Asn Phe Pro Glu Ala Gly Ser Ser Ser 200 205 Gly Ala Leu Phe Pro Ser Ala Val Ser Pro Pro Glu Leu Arg Gln Arg 215 220 Leu His Gly Val Glu Leu Leu Lys Ile Phe Asn Lys Lys Gln Lys Lys 225 230 235 Arg Ala 242

<210> 988 <211> 154 <212>Amino acid <213> Homo sapiens

<400> 988 Cys Cys Arg Trp Ile Asp Cys Phe Ala Leu Tyr Asp Gln Gln Glu Glu 10 Leu Val Arg His Ile Glu Lys Val His Ile Asp Gln Arg Lys Gly Glu 20 25 Asp Phe Thr Cys Phe Trp Ala Gly Cys Pro Arg Arg Tyr Lys Pro Phe 40 Asn Ala Arg Tyr Lys Leu Leu Ile His Met Arg Val His Ser Gly Glu 55 Lys Pro Asn Lys Cys Thr Phe Glu Gly Cys Glu Lys Ala Phe Ser Arg 70 75 Leu Glu Asn Leu Lys Ile His Leu Arg Ser His Thr Gly Glu Lys Pro 90 Tyr Leu Cys Gln His Pro Gly Cys Gln Lys Ala Phe Ser Asn Ser Ser 100 105 Asp Arg Ala Lys His Gln Arg Thr His Leu Asp Thr Lys Pro Tyr Ala 115 120 125 Cys Gln Ile Pro Gly Cys Thr Lys Arg Tyr Thr Asp Pro Ser Ser Leu 135 140 Arg Lys His Val Lys Ala His Ser Ser Lys 145 150

<210> 989 <211> 65 <212>Amino acid <213> Homo sapiens

<210> 990 <211> 297 <212>Amino acid <213> Homo sapiens

Leu Met Asn Lys Met Asp Asp Leu Asn Leu His Tyr Arg Phe Leu Asn 40 Trp Arg Arg Arg Ile Arg Glu Ile Arg Glu Val Arg Ala Phe Arg Tyr Gln Glu Arg Phe Lys His Ile Leu Val Asp Gly Asp Thr Leu Ser Tyr 75 His Gly Asn Ser Gly Glu Val Gly Cys Tyr Val Ala Ser Arg Pro Leu 90 Thr Lys Asp Ser Asn Tyr Phe Glu Val Ser Ile Val Asp Ser Gly Val 105 Arg Gly Thr Ile Ala Val Gly Leu Val Pro Gln Tyr Tyr Ser Leu Asp 120 125 His Gln Pro Gly Trp Leu Pro Asp Ser Val Ala Tyr His Ala Asp Asp 135 Gly Lys Leu Tyr Asn Gly Arg Ala Lys Gly Arg Gln Phe Gly Ser Lys . 150 155 Cys Asn Ser Gly Asp Arg Ile Gly Cys Gly Ile Glu Pro Val Ser Phe 165 170 Asp Val Gln Thr Ala Gln Ile Phe Phe Thr Lys Asn Gly Lys Arg Val 185 180 Gly Ser Thr Ile Met Pro Met Ser Pro Asp Gly Leu Phe Pro Ala Val . 200 Gly Met His Ser Leu Gly Glu Glu Val Arg Leu His Leu Asn Ala Glu 215 220 Leu Gly Arg Glu Asp Asp Ser Val Met Met Val Asp Ser Tyr Glu Asp 230 235 Glu Trp Gly Arg Leu His Asp Val Arg Val Cys Gly Thr Leu Leu Glu 250 Tyr Leu Gly Lys Gly Lys Ser Ile Val Asp Val Gly Leu Ala Gln Ala 265 Arg His Pro Leu Ser Thr Arg Ser His Tyr Phe Glu Val Glu Ile Val . 280 Asp Pro Gly Glu Lys Cys Tyr Ile Ala 295

<210> 991 <211> 207 <212>Amino acid <213> Homo sapiens

<400> 991

Gln Gln Ala Glu Glu His Leu Ala Ala Tyr Ser Val Ser Asp Ser Asp Ser Gly Lys Asp Pro Ser Met Glu Cys Cys Arg Arg Ala Thr Pro Gly 25 Thr Leu Leu Phe Leu Ala Phe Leu Leu Leu Ser Ser Arg Thr Ala 40 Arg Ser Glu Glu Asp Arg Asp Gly Leu Trp Asp Ala Trp Gly Pro Trp Ser Glu Cys Ser Arg Thr Cys Gly Gly Gly Ala Ser Tyr Ser Leu Arg Arg Cys Leu Ser Ser Lys Ser Cys Glu Gly Arg Asn Ile Arg Tyr Arg 90 Thr Cys Ser Asn Val Asp Cys Pro Pro Glu Ala Gly Asp Phe Arg Ala 105 110 Gln Gln Cys Ser Ala His Asn Asp Val Lys His His Gly Gln Phe Tyr 120 125 Glu Trp Leu Pro Val Ser Asn Asp Pro Asp Asn Pro Cys Ser Leu Lys 135 140

<210> 992 <211> 184 <212>Amino acid <213> Homo sapiens

<400> 992 Arg Leu Leu Arg Gln Glu Leu Val Val Leu Cys His Leu His His Pro Ser Leu Ile Ser Leu Leu Ala Ala Gly Ile Arg Pro Arg Met Leu Val Met Glu Leu Ala Ser Lys Gly Ser Leu Asp Arg Leu Leu Gln Gln Asp Lys Ala Ser Leu Thr Arg Thr Leu Gln His Arg Ile Ala Leu His Val 55 Ala Asp Gly Leu Arg Tyr Leu His Ser Ala Met Ile Ile Tyr Arg Asp 70 75 Leu Lys Pro His Asn Val Leu Leu Phe Thr Leu Tyr Pro Asn Ala Ala 85 90 Ile Ile Ala Lys Ile Ala Asp Tyr Gly Ile Ala Gln Tyr Cys Cys Arg 105 100 Met Gly Ile Lys Thr Ser Glu Gly Thr Pro Gly Phe Arg Ala Pro Glu 120 Val Ala Arg Gly Asn Val Ile Tyr Asn Gln Gln Ala Asp Val Tyr Ser 135 140 Phe Gly Leu Leu Tyr Asp Ile Leu Thr Thr Gly Gly Arg Ile Val 150 155 Glu Gly Leu Lys Phe Pro Asn Glu Phe Asp Glu Leu Glu Ile Gln Gly 165 170 Lys Leu Pro Asp Pro Val Lys Glu 180

<210> 993 <211> 144 <212>Amino acid <213> Homo sapiens

 Pro
 Lys
 Val
 Ile
 Ser
 Thr
 Pro
 Pro</th

<210> 994 <211> 147 <212>Amino acid <213> Homo sapiens

<400> 994 Ser Phe Pro Asp Arg Thr Ala Ser Leu Val Leu Leu Ser Val Pro Val 10 Gly Gln Ala Gly Met Gln Gln Arg Gly Leu Ala Ile Val Ala Leu Ala 20 25 Val Cys Ala Ala Leu His Ala Ser Pro Ala Ile Leu Pro Ile Ala Ser 40 Ser Cys Cys Thr Glu Val Ser His His Ile Ser Arg Arg Leu Leu Glu 55 Arg Val Asn Met Cys Arg Ile Gln Arg Ala Asp Gly Asp Cys Asp Leu 70 75 Ala Ala Val Ile Leu His Val Lys Arg Arg Ile Cys Val Ser Pro 85 90 His Asn His Thr Val Lys Gln Trp Met Lys Val Gln Ala Ala Lys Lys 100 105 110 Asn Gly Lys Gly Asn Val Cys His Arg Lys Lys His His Gly Lys Arg 120 125 Asn Ser Asn Arg Ala His Gln Gly Lys His Glu Thr Tyr Gly His Lys 130 Thr Pro Tyr 145 147

<210> 995 <211> 245 <212>Amino acid <213> Homo sapiens

Leu Ile Pro Pro Ala Met Thr Val Pro Ser Pro Lys Lys Thr Pro Ala 70 75 Ile Pro Thr Pro Lys Glu Ala Pro Ala Thr Pro Ser Ser Lys Glu Ala 85 90 Ser Ser Pro Pro Ala Val Thr Pro Ser Thr Tyr Lys Gly Ala Pro Ser 100 105 110 Pro Lys Glu Leu Leu Ile Pro Pro Ala Val Thr Ser Pro Ser Pro Lys 115 120 125 Glu Ala Pro Thr Pro Pro Ala Val Thr Pro Pro Ser Pro Glu Lys Gly 130 135 140 Pro Ala Thr Pro Ala Pro Lys Gly Thr Pro Thr Ser Pro Pro Val Thr 150 155 160 Pro Ser Ser Leu Lys Asp Ser Pro Thr Ser Pro Ala Ser Val Thr Cys 165 170 175 Lys Met Gly Ala Thr Val Pro Gln Ala Ser Lys Gly Leu Pro Ala Lys 185 190 180 Lys Gly Pro Thr Ala Leu Lys Glu Val Leu Val Ala Pro Ala Pro Glu 195 200 Ser Thr Pro Ile Ile Thr Ala Pro Thr Arg Lys Gly Pro Gln Thr Lys 210 215 220 Lys Ser Ser Ala Thr Ser Pro Pro Ile Cys Pro Asp Pro Ser Ala Lys 225 230 235 Asn Gly Ser Lys Gly 245

<210> 996 <211> 25 <212>Amino acid <213> Homo sapiens

<210> 997 <211> 56 <212>Amino acid <213> Homo sapiens

<210> 998 <211> 198

<212>Amino acid <213> Homo sapiens

<400> 998 Trp Met Arg Ala Pro Met Leu Gln Lys Gln Gln Ala Pro Arg Met Asp Thr Pro Pro Pro Glu Glu Arg Leu Glu Lys Gln Asn Glu Lys Leu Asn 25 Asn Gln Glu Glu Glu Thr Glu Phe Lys Glu Leu Asp Gly Leu Arg Glu 40 Ala Leu Ala Asn Leu Arg Gly Leu Ser Glu Glu Glu Arg Ser Glu Lys 55 60 Ala Met Leu Arg Ser Arg Ile Glu Glu Gln Ser Gln Leu Ile Cys Ile 70 75 Leu Lys Arg Arg Ser Asp Glu Ala Leu Glu Arg Cys Gln Ile Leu Glu 85 90 Leu Leu Asn Ala Glu Leu Glu Glu Lys Met Met Gln Glu Ala Glu Lys 100 105 Leu Lys Ala Gln Gly Glu Tyr Ser Arg Lys Leu Glu Glu Arg Phe Met 120 125 Thr Leu Ala Ala Asn His Glu Leu Met Leu Arg Phe Lys Asp Glu Tyr 140 135 Lys Ser Glu Asn Ile Lys Leu Arg Glu Glu Asn Glu Lys Leu Arg Leu 150 155 Glu Asn Asn Ser Leu Phe Ser Gln Ala Leu Lys Asp Glu Glu Ala Lys 165 170 Val Leu Gln Leu Thr Val Arg Cys Glu Ala Leu Thr Gly Glu Leu Glu 180 185 Thr Leu Lys Glu Arg Cys 195 198

<210> 999 <211> 79 <212>Amino acid <213> Homo sapiens

<210> 1000 <211> 206 <212>Amino acid <213> Homo sapiens

<400> 1000 Val Thr Thr Thr His Ser Val Gly Arg Gly His Glu Leu Gln Leu Leu Asn Glu Glu Leu Arg Asn Ile Glu Leu Glu Cys Gln Asn Ile Met Gln Ala His Arg Leu Gln Lys Val Thr Asp Gln Tyr Gly Asp Ile Trp Thr Leu His Asp Gly Gly Phe Arg Asn Tyr Asn Thr Ser Ile Asp Met 55 Gln Arg Gly Lys Leu Asp Asp Ile Met Glu His Pro Glu Lys Ser Asp 75 Lys Asp Ser Ser Ser Ala Tyr Asn Thr Ala Glu Ser Cys Arg Ser Thr 90 Pro Leu Thr Val Asp Arg Ser Pro Asp Ser Ser Leu Pro Arg Val Ile 100 105 Asn Leu Thr Asn Lys Lys Asn Leu Arg Ser Thr Met Ala Ala Thr Gln 120 Ser Ser Ser Gly Gln Ser Ser Lys Glu Ser Thr Ser Thr Lys Ala Lys 135 140 Thr Thr Glu Gln Gly Cys Ser Ala Glu Ser Lys Glu Lys Val Leu Glu 150 155 Gly Ser Lys Leu Pro Asp Gln Glu Lys Ala Val Ser Glu His Ile Pro 170 165 Tyr Leu Ser Pro Tyr His Ser Ser Ser Tyr Arg Tyr Ala Asn Ile Pro 185 Ala His Ala Arg His Tyr Gln Ser Tyr Met Gln Leu Ile Gln

<210> 1001 <211> 138 <212>Amino acid <213> Homo sapiens

<400> 1001 Val Trp Gly Cys Leu Ala Thr Val Ser Thr His Lys Lys Ile Gln Gly Leu Pro Phe Gly Asn Cys Leu Pro Val Ser Asp Gly Pro Phe Asn Asn Ser Thr Gly Ile Pro Phe Phe Tyr Met Thr Ala Lys Asp Pro Val Val Ala Asp Leu Met Lys Asn Pro Met Ala Ser Leu Met Leu Pro Glu Ser Glu Gly Glu Phe Cys Arg Lys Asn Ile Val Asp Pro Glu Asp Pro Arg 75 Cys Val Gln Leu Thr Leu Thr Gly Gln Met Ile Ala Val Ser Pro Glu 90 Glu Val Glu Phe Ala Lys Gln Ala Met Phe Ser Arg His Pro Gly Met 105 Arg Lys Trp Pro Arg Gln Tyr Glu Trp Phe Phe Met Lys Met Arg Ile 120 Glu His Ile Trp Leu Gln Lys Trp Tyr Gly 135 138

<210> 1002 <211> 133

<212>Amino acid <213> Homo sapiens

<400> 1002 Gln Ala Ala Asn Met Ala Val Ala Arg Val Asp Ala Ala Leu Pro Pro Gly Glu Gly Ser Val Val Asn Trp Ser Gly Gln Gly Leu Gln Lys Leu 20 25 Gly Pro Asn Leu Pro Cys Glu Ala Asp Ile His Thr Leu Ile Leu Asp 40 Lys Asn Gln Ile Ile Lys Leu Glu Asn Leu Glu Lys Cys Lys Arg Leu 55 Ile Gln Leu Ser Val Ala Asn Asn Arg Leu Val Arg Met Met Gly Val 70 75 Ala Lys Leu Thr Leu Leu Arg Val Leu Asn Leu Pro His Asn Ser Ile 85 90 Gly Cys Val Glu Gly Leu Lys Glu Leu Val His Leu Glu Trp Leu Asn 105 Leu Ala Gly Asn Asn Leu Ile Ala Met Glu Gln Ile Asn Ser Cys Thr 115 120 Ala Leu Gln His Leu 130 133

<210> 1003 <211> 276 <212>Amino acid <213> Homo sapiens

<400> 1003 Phe Arg Ala Ala Val Gly Ala Val Pro Glu Gly Ala Trp Lys Asp Thr Ala Gln Leu His Lys Ser Glu Glu Ala Lys Arg Val Leu Arg Tyr Tyr 25 Leu Phe Gln Gly Gln Arg Tyr Ile Trp Ile Glu Thr Gln Gln Ala Phe 40 Tyr Gln Val Ser Leu Leu Asp His Gly Arg Ser Cys Asp Asp Val His Arg Ser Arg His Gly Leu Ser Leu Gln Asp Gln Met Glu Arg Lys Ala 70 75 Ile Tyr Gly Pro Asn Val Ile Ser Ile Pro Val Lys Ser Tyr Pro Gln 85 Leu Leu Val Asp Glu Ala Phe Ser Ile Ala Leu Trp Leu Ala Asp His 100 105 Tyr Tyr Trp Tyr Ala Leu Cys Ile Phe Leu Ile Ser Ser Ile Ser Ile 120 Cys Leu Ser Leu Tyr Lys Thr Arg Lys Gln Ser Gln Thr Leu Arg Asp 135 Met Val Lys Leu Ser Met Arg Val Cys Val Cys Arg Pro Gly Glu 150 155 Glu Glu Trp Val Asp Ser Ser Glu Leu Val Pro Gly Asp Cys Leu Val 165 170 Leu Ser Gln Glu Gly Gly Leu Met Pro Cys Asp Ala Ala Leu Val Ala 185 Gly Glu Cys Met Val Asn Asp Ser Ser Leu Thr Gly Glu Ser Ile Pro 200

 Val
 Leu
 Lys
 Thr
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 Glu
 Gly
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 Gly
 Pro
 Tyr
 Cys
 Ala
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<210> 1004 <211> 222 <212>Amino acid <213> Homo sapiens

<400> 1004 Phe Val Gly Gly Leu His Leu His Leu Cys Leu Leu Cys Phe Met Leu Pro Glu Asp Ala Ala Met Ala Val Leu Thr Ala Ser Asn His 25 Val Ser Asn Val Thr Val Asn Tyr Asn Ile Thr Val Glu Arg Met Asn 40 Arg Met Gln Gly Leu Arg Val Ser Thr Val Pro Ala Val Leu Ser Pro 55 · Asn Ala Thr Leu Ala Leu Thr Ala Gly Val Leu Val Asp Ser Ala Val 70 75 Glu Val Ala Phe Leu Trp Thr Phe Gly Asp Gly Glu Gln Ala Leu His 85 90 Gln Phe Gln Pro Pro Tyr Asn Glu Ser Phe Pro Val Pro Asp Pro Ser 105 Val Ala Gln Val Leu Val Glu His Asn Val Thr His Thr Tyr Ala Ala 120 Pro Gly Glu Tyr Val Leu Thr Val Leu Ala Ser Asn Ala Phe Glu Asn 135 Arg Thr Gln Gln Val Leu Ile Arg Ser Gly Arg Val Pro Ile Val Ser 150 155 Leu Glu Cys Val Ser Cys Lys Ala Gln Ala Val Tyr Glu Val Ser Arg 170 Ser Ser Tyr Val Tyr Leu Glu Gly Arg Cys Leu Asn Cys Ser Ser Gly 185 Ser Lys Arg Gly Arg Trp Ala Ala Arg Thr Phe Ser Asn Lys Thr Leu 200 Val Leu Asp Glu Thr Thr Ser Thr Gly Ser Ala Ser Met 215

<210> 1005 <211> 363 <212>Amino acid <213> Homo sapiens

 $<\!400>$ 1005 Pro Glu Phe Leu Gly Arg Leu Phe Arg Gly Lys Ala Ala Thr Leu His 1 5 10 15

Val His Ser Asp Gln Lys Pro Leu His Asp Gly Ala Leu Gly Ser Gln 25 Gln Asn Leu Val Arg Met Lys Glu Ala Leu Arg Ala Ser Thr Met Asp 40 Val Thr Val Val Leu Pro Ser Gly Leu Glu Lys Arg Ser Val Leu Asn Gly Ser His Ala Met Met Asp Leu Leu Val Glu Leu Cys Leu Gln Asn 70 His Leu Asn Pro Ser His His Ala Leu Glu Ile Arg Ser Ser Glu Thr 85 90 Gln Gln Pro Leu Ser Phe Lys Pro Asn Thr Leu Ile Gly Thr Leu Asn 105 Val His Thr Val Phe Leu Lys Glu Lys Val Pro Glu Glu Lys Val Lys 120 Pro Gly Pro Pro Lys Val Pro Glu Lys Ser Val Arg Leu Val Val Asn 135 Tyr Leu Arg Thr Gln Lys Ala Val Val Arg Val Ser Pro Glu Val Pro 150 155 Leu Gln Asn Ile Leu Pro Val Ile Cys Ala Lys Cys Glu Val Ser Pro 165 170 Glu His Val Val Leu Leu Arg Asp Asn Ile Ala Gly Glu Glu Leu Glu 180 185 Leu Ser Lys Ser Leu Asn Glu Leu Gly Ile Lys Glu Leu Tyr Ala Trp 195 200 205 Asp Asn Arg Arg Glu Thr Phe Arg Lys Ser Ser Leu Gly Asn Asp Glu 215 220 Thr Asp Lys Glu Lys Lys Lys Phe Leu Gly Phe Phe Lys Val Asn Lys 230 235 Arg Ser Asn Ser Lys Gly Cys Leu Thr Thr Pro Asn Ser Pro Ser Met 245 250 His Ser Arg Ser Leu Thr Leu Gly Pro Ser Leu Ser Leu Gly Ser Ile 265 270 Ser Gly Val Ser Val Lys Ser Glu Met Lys Lys Arg Arg Ala Pro Pro - 275 280 Pro Pro Gly Ser Gly Pro Pro Val Gln Asp Lys Ala Ser Glu Lys Val 295 Ser Leu Gly Ser Gln Ile Asp Leu Gln Lys Lys Lys Arg Arg Ala Pro 310 315 Ala Pro Pro Pro Pro Gln Pro Pro Pro Pro Ser Pro Leu Ile Pro Asn 325 330 Arg Thr Glu Asp Lys Glu Glu Asn Arg Lys Ser Thr Met Val Tyr Cys 345 Cys Ala Ser Phe Pro Thr Gln Ala Lys Arg Phe 360

<210> 1006 <211> 95 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(95) <223> X = any amino acid or stop code

<400> 1006
Val Gln Trp His Asn Leu His Ser Leu Gln Pro Leu Pro Ala Gly Phe
1 5 10 15
Lys Xaa Phe Leu Cys Phe Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys

<210> 1007 <211> 151 <212>Amino acid <213> Homo sapiens

145

<210> 1008 <211> 64

<400> 1007 Gly Arg Arg Phe Arg Pro Pro Ser Asp Glu Glu Arg Glu Pro Trp Glu 5 10 Pro Trp Thr Gln Leu Arg Leu Ser Gly His Leu Lys Pro Leu His Tyr 25 Asn Leu Met Leu Thr Ala Phe Met Glu Asn Phe Thr Phe Ser Gly Glu Val Asn Val Glu Ile Ala Cys Arg Asn Ala Thr Arg Tyr Val Val Leu His Ala Ser Arg Val Ala Val Glu Lys Val Gln Leu Ala Glu Asp Arg Ala Phe Gly Ala Val Pro Val Ala Gly Phe Phe Leu Tyr Pro Gln Thr 85 Gln Val Leu Val Val Leu Asn Arg Thr Leu Asp Ala Gln Arg Asn 105 Tyr Asn Leu Lys Ile Ile Tyr Asn Ala Leu Ile Glu Asn Glu Leu Leu 120 125 Gly Phe Phe Arg Ser Ser Tyr Val Leu His Gly Glu Arg Arg Phe Leu 135 Gly Val Thr Gln Phe Ser Pro

<212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(64) <223> X = any amino acid or stop code

150 151

Pro Ser Ser Trp Thr Gly Arg Ile Asn Thr Val Lys Met Thr Ile Leu
50 55 60 64

<210> 1009 <211> 60 <212>Amino acid <213> Homo sapiens

<210> 1010 <211> 44 <212>Amino acid <213> Homo sapiens

<210> 1011 <211> 219 <212>Amino acid <213> Homo sapiens

Val Gly Tyr Leu Arg Glu Ser Ile Ala Arg Asn His Leu Thr Asp Arg 90 Leu Asn Leu Ile Ile Thr Ser Asp His Gly Met Thr Thr Val Asp Lys 105 Arg Ala Gly Asp Leu Val Glu Phe His Lys Phe Pro Asn Phe Thr Phe 120 Arg Asp Ile Glu Phe Glu Leu Leu Asp Tyr Gly Pro Asn Gly Met Leu 135 Leu Pro Lys Glu Gly Arg Leu Glu Lys Val Tyr Asp Ala Leu Lys Asp 155 150 Ala His Pro Lys Leu His Val Tyr Lys Lys Glu Ala Phe Pro Glu Ala 170 165 Phe His Tyr Ala Asn Asn Pro Arg Val Thr Pro Leu Leu Met Tyr Ser 185 Asp Leu Gly Tyr Val Ile His Gly Val Ser Arg Leu Leu Glu Ala Pro 200 Pro Pro Gly Ala Pro Ser Pro Gly Ser Gly Ser 215

<210> 1012 <211> 89 <212>Amino acid <213> Homo sapiens

<210> 1013 <211> 82 <212>Amino acid <213> Homo sapiens

Trp Asp 82

> <210> 1014 <211> 107 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1) ... (107)

<223> X = any amino acid or stop code

<400> 1014 Tyr Cys Phe Cys Phe Asp Leu Leu His Xaa Cys Ile His Arg Asp Val 10 Lys Pro Glu Asn Ile Leu Ile Thr Lys His Ser Val Ile Lys Leu Cys 20 25 Asp Phe Gly Phe Ala Arg Leu Leu Thr Gly Pro Ser Asp Tyr Tyr Thr 40 Asp Tyr Val Ala Thr Arg Trp Tyr Arg Ser Pro Glu Leu Pro Val Gly 55 60 Asp Thr Gln Tyr Gly Pro Pro Val Asp Val Trp Ala Ile Gly Cys Val 70 75 Ser Ala Glu Leu Leu Ser Gly Lys Cys Leu Trp Trp Pro Gly Lys Ser 85 90 Asp Met Leu Asp Gln Leu Tyr Leu Ile Arg Lys 100 105

<210> 1015 <211> 70 <212>Amino acid <213> Homo sapiens

<210> 1016 <211> 142 <212>Amino acid <213> Homo sapiens

<400> 1016 Gly Gly Ile Leu Ala Met Glu Tyr Ala Pro Gly Gly Thr Leu Ala Glu 10 5 · Phe Ile Gln Lys Arg Cys Asn Ser Leu Leu Glu Glu Glu Thr Ile Leu 25 His Phe Phe Val Gln Ile Leu Leu Ala Leu His His Val His Thr His 40 Leu Ile Leu His Arg Asp Leu Lys Thr Gln Asn Ile Leu Leu Asp Lys 55 60 His Arg Met Val Val Lys Ile Gly Asp Phe Gly Ile Ser Lys Ile Leu 75 Ser Ser Lys Ser Lys Ala Tyr Thr Val Val Gly Thr Pro Cys Tyr Ile 90 Ser Pro Glu Leu Cys Glu Gly Lys Pro Tyr Asn Gln Lys Ser Asp Ile 105 110 Trp Ala Leu Gly Cys Val Leu Tyr Glu Leu Ala Ser Leu Lys Arg Ala 120 125 Phe Glu Ala Ala Asn Leu Pro Ala Leu Val Leu Lys Ile Met 135

<210> 1017 <211> 87 <212>Amino acid <213> Homo sapiens

<210> 1018 <211> 160 <212>Amino acid <213> Homo sapiens

55 60' Lys Lys Thr Ser Ala Val Asn Tyr Met Thr Gln Val Val Arg Cys Asp 70 75 Thr Lys Met Lys Asp Arg Cys Ile Gly Ser Thr Cys Asn Arg Tyr Gln 90 Cys Pro Ala Gly Cys Leu Asn His Lys Ala Lys Ile Phe Gly Ser Leu 105 110 Phe Tyr Glu Ser Phe Ala Ser Ile Cys Arg Ala Ala Ile His Tyr Gly 120 Ile Leu Asp Asp Lys Gly Gly Leu Val Asp Ile Thr Arg Asn Gly Lys 135 140 Val Pro Phe Phe Val Lys Ser Glu Arg His Gly Val Gln Ser Leu Arg 150 155

<210> 1019 <211> 174 <212>Amino acid <213> Homo sapiens

<400> 1019 Val Pro Gln Asn Ile Ile Cys Ala Phe Phe Cys Val Pro Cys Arg Phe 10 Ala Ser Thr Ile Pro Phe Trp Gly Leu Thr Leu His Leu Gln His Leu 25 Gly Asn Asn Val Phe Leu Leu Gln Thr Leu Phe Gly Ala Val Thr Leu 40 Leu Ala Asn Cys Val Ala Pro Trp Ala Leu Asn His Met Ser Arg Arg 55 60 Leu Ser Gln Met Leu Leu Met Phe Leu Leu Ala Thr Cys Leu Leu Ala 70 Ile Ile Phe Val Pro Gln Glu Met Gln Thr Leu Arg Val Val Leu Ala 85 .90 Thr Leu Gly Val Gly Ala Ala Ser Leu Gly Ile Thr Cys Ser Thr Ala 105 Gln Glu Asn Glu Leu Ile Pro Ser Ile Ile Arg Gly Arg Ala Thr Gly 120 Ile Thr Gly Asn Phe Ala Asn Ile Gly Gly Ala Leu Ala Ser Leu Val 135 140 Met Ile Leu Ser Ile Tyr Ser Arg Pro Leu Pro Trp Ile Ile Tyr Gly 150 155 Val Phe Ala Ile Leu Ser Gly Leu Val Val Leu Leu Pro 170

<210> 1020 <211> 225 <212>Amino acid <213> Homo sapiens

 $^{<400>}$ 1020 Val Leu Val Ser Arg Asp His Met Lys Ser Ala Gln Gln Phe Phe Gln 1 5 10 15 Leu Val Gly Gly Ser Ala Ser Glu Cys Asp Thr Ile Pro Gly Arg Gln

20 25 Cys Met Ala Ser Cys Phe Phe Leu Leu Lys Gln Phe Asp Asp Val Leu 40 Ile Tyr Leu Asn Ser Phe Lys Ser His Phe Tyr Asn Asp Asp Ile Phe Asn Phe Asn Tyr Ala Gln Ala Lys Ala Ala Thr Gly Asn Thr Ser Glu Gly Glu Glu Ala Phe Leu Leu Ile Gln Ser Glu Lys Met Lys Asn Asp Tyr Ile Tyr Leu Ser Trp Leu Ala Arg Gly Tyr Ile Met Asn Lys Lys 100 105 Pro Arg Leu Ala Trp Glu Leu Tyr Leu Lys Met Glu Thr Ser Gly Glu 120 Ser Phe Ser Leu Leu Gln Leu Ile Ala Asn Asp Cys Tyr Lys Met Gly 135 Gln Phe Tyr Tyr Ser Ala Lys Ala Phe Asp Val Leu Glu Arg Leu Asp 150 155 Pro Asn Pro Glu Tyr Trp Glu Gly Lys Arg Gly Ala Cys Val Gly Ile 165 170 Phe Gln Met Ile Ile Ala Gly Arg Glu Pro Lys Glu Thr Leu Arg Glu 185 Val Leu His Leu Leu Arg Ser Thr Gly Asn Thr Gln Val Glu Tyr Met 200 Ile Arg Ile Met Lys Lys Trp Ala Lys Glu Asn Arg Val Ser Ile Leu 215 225

<210> 1021 <211> 118 <212>Amino acid <213> Homo sapiens

<400> 1021 Leu Lys Val Ser Asp Glu Leu Val Gln Gln Tyr Gln Ile Lys Asn Gln 10 Cys Leu Ser Ala Ile Ala Ser Asp Ala Glu Glu Pro Lys Ile Asp 25 Pro Tyr Ala Phe Val Glu Gly Asp Glu Glu Phe Leu Phe Pro Asp Lys Lys Asp Arg Gln Asn Ser Glu Arg Glu Ala Gly Lys Lys His Lys Val Arg Glu Ile Thr Val His Gln Arg Val Thr Val Asp Phe Val Ala Leu His Ile Val Thr Leu Leu Pro Gln Leu Ser His Phe Phe Cys Leu 90 Arg Ile Glu Arg Val Ile Ile Tyr Leu Glu Lys Pro Ile Phe Ala Arg 100 105 Leu Arg Trp Leu Met Pro 115 118

<210> 1022 <211> 178 <212>Amino acid <213> Homo sapiens

<400> 1022 Gly Val Pro Arg Asn Leu Pro Ser Ser Leu Glu Tyr Leu Leu Ser 5 10 Tyr Asn Arg Ile Val Lys Leu Ala Pro Glu Asp Leu Ala Asn Leu Thr 25 Ala Leu Arg Val Leu Asp Val Gly Gly Asn Cys Arg Arg Cys Asp His 40 Ala Pro Asn Pro Cys Met Glu Cys Pro Arg His Phe Pro Gln Leu His 55 Pro Asp Thr Phe Ser His Leu Ser Arg Leu Glu Gly Leu Val Leu Lys 70 75 Asp Ser Ser Leu Ser Trp Leu Asn Ala Ser Trp Phe Arg Gly Leu Gly 85 90 Asn Leu Arg Val Leu Asp Leu Ser Glu Asn Phe Leu Tyr Lys Cys Ile 100 105 110 Thr Lys Thr Lys Ala Phe Gln Gly Leu Thr Gln Leu Arg Lys Leu Asn 115 120 125 Leu Ser Phe Asn Tyr Gln Lys Arg Val Ser Phe Ala His Leu Val Ser 135 140 Gly Pro Pro Phe Leu Arg Gly Ser Leu Gly Arg Pro Leu Lys Gly Ala 155 150 Gly Thr Trp His Gly Asn Leu Ser Phe Pro Leu His Phe Glu Trp Gly 170 Lys Thr 178

<210> 1023 <211> 146 <212>Amino acid <213> Homo sapiens

<400> 1023 Ile Leu Phe Ala Ala Leu Ile Trp Ser Ser Phe Asp Glu Asn Ile Glu 10 Ala Ser Ala Gly Gly Gly Gly Ser Ser Ile Asp Ala Val Met Val 20 Asp Ser Gly Ala Val Val Glu Gln Tyr Lys Arg Met Gln Ser Gln Glu Ser Ser Ala Lys Arg Ser Asp Glu Gln Arg Lys Met Lys Glu Gln Gln 55 Ala Ala Glu Glu Leu Arg Glu Lys Gln Ala Ala Glu Gln Glu Arg Leu 70 75 Lys Gln Leu Glu Lys Glu Arg Leu Ala Ala Gln Glu Gln Lys Lys Gln 90 Ala Glu Glu Ala Ala Lys Gln Ala Glu Leu Lys Gln Lys Gln Ala Glu 105 ' 110 Glu Ala Ala Ala Lys Ala Ala Ala Asp Ala Lys Ala Lys Ala Glu Ala 120 125 Asp Ala Lys Ala Ala Glu Glu Ala Ala Lys Lys Ala Ala Ala Asp Ala 135 Lys Lys 145 146

<210> 1024 <211> 39 <212>Amino acid

<213> Homo sapiens

<210> 1025 <211> 53 <212>Amino acid <213> Homo sapiens

<210> 1026 <211> 365 <212>Amino acid <213> Homo sapiens

<400> 1026 Pro Arg Val Arg Ser Ser Gly Gly Gln Glu Asp Pro Ala Ser Gln Gln 5 10 Trp Ala Arg Pro Arg Phe Thr Gln Pro Ser Lys Met Arg Arg Arg Val 20 25 3.0 Ile Ala Arg Pro Val Gly Ser Ser Val Arg Leu Lys Cys Val Ala Ser 35 40 Gly His Pro Arg Pro Asp Ile Thr Trp Met Lys Asp Asp Gln Ala Leu 55 Thr Arg Pro Glu Ala Ala Glu Pro Arg Lys Lys Trp Thr Leu Ser 75 Leu Lys Asn Leu Arg Pro Glu Asp Ser Gly Lys Tyr Thr Cys Arg Val 90 Ser Asn Arg Ala Gly Ala Ile Asn Ala Thr Tyr Lys Val Asp Val Ile 105 Gln Arg Thr Arg Ser Lys Pro Val Leu Thr Gly Thr His Pro Val Asn 120 125 Thr Thr Val Asp Phe Gly Gly Thr Thr Ser Phe Gln Cys Lys Val Arg Ser Asp Val Lys Pro Val Ile Gln Trp Leu Lys Arg Val Glu Tyr Gly

145 150 155 Ala Glu Gly Arg His Asn Ser Thr Ile Asp Val Gly Gly Gln Lys Phe 165 170 Val Val Leu Pro Thr Gly Asp Val Trp Ser Arg Pro Asp Gly Ser Tyr 185 Leu Asn Lys Leu Leu Ile Thr Arg Ala Arg Gln Asp Asp Ala Gly Met 200 Tyr Ile Cys Leu Gly Ala Asn Thr Met Gly Tyr Ser Phe Arg Ser Ala 215 Phe Leu Thr Val Leu Pro Asp Pro Lys Pro Pro Gly Pro Pro Val Ala 230 235 Ser Ser Ser Ser Ala Thr Ser Leu Pro Trp Pro Val Val Ile Gly Ile 250 245 Pro Ala Gly Ala Val Phe Ile Leu Gly Thr Leu Leu Leu Trp Leu Cys 265 Gln Ala Gln Lys Lys Pro Cys Thr Pro Ala Pro Ala Pro Pro Leu Pro 285 280 Gly His Arg Pro Pro Gly Thr Ala Arg Asp Arg Ser Gly Asp Lys Asp 295 300 Leu Pro Ser Leu Ala Ala Leu Ser Ala Gly Pro Gly Val Gly Leu Cys 310 315 Glu Glu His Gly Ser Pro Ala Ala Pro Gln His Leu Leu Gly Pro Gly 325 330 335 Pro Val Ala Gly Pro Lys Leu Tyr Pro Lys Leu Tyr Thr Asp Ile Pro 340 345 His His Thr His Thr Pro His Pro Pro Ala Asn 360

<210> 1027 <211> 30 <212>Amino acid <213> Homo sapiens

<210> 1028 <211> 104 <212>Amino acid <213> Homo sapiens

65 70 75 80

His Lys Tyr Arg Arg Arg Cys Leu Ser Glu Arg Lys Arg Leu Gly Ile

85 90 95

Gly Gln Ser Gln Glu Met Asn Thr

100 104

<210> 1029 <211> 119 <212>Amino acid <213> Homo sapiens

<210> 1030

| Color | Colo

<211> 171
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(171)
<223> X = any amino acid or stop code

<400> 1030 Pro Asp His Arg His Gly Ala Leu Trp Trp Trp Tyr Ser Cys Gly Val 10 Leu Pro Val Thr Val Ser Arg Asn Glu Gly Asp Glu Arg Asn Gln Val 20 25 Leu Thr Leu Tyr Leu Trp Ile Arg Gln Glu Trp Thr Asp Ala Tyr Leu 40 45 Arg Trp Asp Pro Asn Ala Tyr Gly Gly Leu Asp Ala Ile Arg Ile Pro 55 Ser Ser Leu Val Trp Arg Pro Asp Ile Val Leu Tyr Asn Lys Tyr Cys 70 75 Leu Ser Ala Ala Pro Pro Leu Ser Tyr Pro Ser Leu Asp Leu Pro Leu 90 Ala Val Gly Val Xaa Xaa Ser Pro Leu Pro Thr Thr Xaa Pro Gly Cys 100 105

<210> 1031 <211> 198 <212>Amino acid <213> Homo sapiens

<400> 1031 Tyr Ala Leu Thr Gly Ala Leu Val Ile Val Thr Gly Met Val Met Gly 5 10 Asn Ile Ala Asp Tyr Phe Asn Leu Pro Val Ser Ser Met Ser Asn Thr 25 Phe Thr Phe Leu Asn Ala Gly Ile Leu Ile Ser Ile Phe Leu Asn Ala Trp Leu Met Glu Ile Val Pro Leu Lys Thr Gln Leu Arg Phe Gly Phe 55 Leu Leu Met Val Leu Ala Val Ala Gly Leu Met Phe Ser His Ser Leu 70 75 Ala Leu Phe Ser Ala Ala Met Phe Ile Leu Gly Val Val Ser Gly Ile 85 90 Thr Met Ser Ile Gly Thr Phe Leu Val Thr Gln Met Tyr Glu Gly Arg 100 105 Gln Arg Gly Ser Arg Leu Leu Phe Thr Asp Ser Phe Phe Ser Met Ala 115 120 125 Gly Met Ile Phe Pro Met Ile Ala Ala Phe Leu Leu Ala Arg Ser Ile 135 140 Glu Trp Tyr Trp Val Tyr Ala Cys Ile Gly Leu Val Tyr Val Ala Ile 150 155 Phe Ile Leu Thr Phe Gly Cys Glu Phe Pro Ala Leu Cys Ser His Ala 165 170 Thr Lys Leu Gly Thr Ala Ser Ser Tyr Pro Ser Leu Asp Val Val Gln 180 185 Leu Arg Thr Leu Asn Ala 195 198

<210> 1032 <211> 138 <212>Amino acid <213> Homo sapiens <220>

<221> misc_feature <222> (1)...(138) <223> X = any amino acid or stop code

<400> 1032
Met Ala Lys Val Gly Leu Lys Thr Glu His Tyr Asp Arg Tyr Pro His

5 10 Met Phe Ser Gly Gly Gln Arg Gln Arg Ile Ala Ile Ala Arg Gly Leu 25 Met Leu Asp Pro Asp Val Val Ile Ala Asp Glu Pro Val Ser Ala Leu 40 Asp Val Ser Val Arg Ala Gln Val Leu Asn Leu Met Met Asp Leu Gln 55 Gln Glu Leu Gly Leu Ser Tyr Val Phe Ile Ser His Asp Leu Ser Val 75 Val Glu His Ile Ala Asp Glu Val Met Val Met Tyr Leu Gly Arg Cys 90 Val Glu Lys Gly Thr Lys Asp Gln Ile Phe Asn Asn Pro Arg His Pro 105 Tyr Thr Gln Ala Leu Leu Ser Ala Thr Pro Arg Leu Asn Pro Asp Asp 120 Arg Arg Glu Arg Ile Lys Leu Ser Xaa * 130 135 137

<210> 1033 <211> 141 <212>Amino acid <213> Homo sapiens

<400> 1033 Ser Ala Thr Leu Glu Arg Val Leu Asn His Pro Asp Glu Thr Gln Ala 10 Arg Arg Leu Met Thr Leu Glu Asp Ile Val Ser Gly Tyr Ser Asn Val 25 Leu Ile Ser Leu Ala Asp Ser Gln Gly Lys Thr Val Tyr His Ser Pro 40 Gly Ala Pro Asp Ile Arg Glu Phe Thr Arg Asp Ala Ile Pro Asp Lys 55 Asp Ala Gln Gly Gly Glu Val Tyr Leu Leu Ser Gly Pro Thr Met Met 70 Met Pro Gly His Gly His Gly His Met Glu His Ser Asn Trp Arg Met 90 Ile Asn Leu Pro Val Gly Pro Leu Val Asp Gly Lys Pro Ile Tyr Thr 105 Leu Tyr Ile Ala Leu Ser Ile Asp Phe His Leu His Tyr Ile Asn Asp 120 Leu Met Asn Lys Leu Ile Met Thr Ala Ser Val Ile Ile . 135

<210> 1034 <211> 112 <212>Amino acid <213> Homo sapiens

Ala Ala Lys Leu Met Lys Asp Val Ile Ala Glu Pro Tyr Arg Glu Arg
50
Leu Leu Pro Gly Phe Arg Gln Ala Arg Gln Ala Val Ala Glu Ile Gly
65
Ala Val Ala Ser Gly Ile Ser Gly Ser Gly Pro Thr Leu Phe Ala Leu
85
Cys Asp Lys Pro Glu Thr Ala Gln Arg Val Ala Asp Trp Leu Gly Lys
100
Leu Leu Pro Val Ala Ser Gly Lys
100
Leu Clys Asp Lys Pro Glu Thr Ala Gln Arg Val Ala Asp Trp Leu Gly Lys
110
Lys Lys
110

<210> 1035 <211> 92 <212>Amino acid <213> Homo sapiens

<210> 1036 <211> 51 <212>Amino acid <213> Homo sapiens

<210> 1037 <211> 72 <212>Amino acid <213> Homo sapiens

<210> 1038 <211> 188 <212>Amino acid <213> Homo sapiens

<400> 1038 Val Phe Cys Leu Ile Ala Asp Leu Asp Pro Ile Asp Glu Leu Val Asp 10 Phe Pro Ile Val Tyr Ala Ser Ala Leu Asn Gly Ile Ala Gly Leu Asp 25 His Glu Asp Met Ala Glu Asp Met Thr Pro Leu Tyr Gln Ala Ile Val 40 Asp His Val Pro Ala Pro Asp Val Asp Leu Asp Gly Pro Phe Gln Met 55 Gln Ile Ser Gln Leu Asp Tyr Asn Ser Tyr Val Gly Val Ile Gly Ile Gly Arg Ile Lys Arg Gly Lys Val Lys Pro Asn Gln Gln Val Thr Ile 90 Ile Asp Ser Glu Gly Lys Thr Arg Asn Ala Lys Val Gly Lys Val Leu 105 Gly His Leu Gly Leu Glu Arg Ile Glu Thr Asp Leu Ala Glu Ala Gly 120 Asp Ile Val Ala Ile Thr Gly Leu Gly Glu Leu Asn Ile Ser Asp Thr 130 135 Val Cys Asp Thr Gln Asn Val Glu Ala Leu Pro Ala Leu Ser Val Asp 150 Glu Pro Thr Val Ser Met Phe Phe Cys Val Asn Thr Ser Pro Phe Cys 165 170 175 Gly Lys Glu Gly Lys Phe Val Thr Ser Arg Gln Ile 185 188

<210> 1039 <211> 122 <212>Amino acid <213> Homo sapiens

 $<\!400>$ 1039 Gin Gly Thr Arg Ala Glu Ser Gln Gly Ser Ser Lys Asp Lys Thr Arg 1 5 10 15 Leu Ala Phe Ala Gly Leu Lys Phe Gly Asp Tyr Gly Ser Ile Asp Tyr

• 20 25 Gly Arg Asn Tyr Gly Val Ala Tyr Asp Ile Gly Ala Trp Thr Asp Val 40 Leu Pro Glu Phe Gly Gly Asp Thr Trp Thr Gln Thr Asp Val Phe Met 55 Thr Gln Arg Ala Thr Gly Val Ala Thr Tyr Arg Asn Asn Asp Phe Phe 70 75 Gly Leu Val Asp Gly Leu Asn Phe Ala Ala Gln Tyr Gln Gly Lys Asn 85 90 Asp Arg Ser Asp Phe Asp Asn Tyr Thr Glu Gly Asn Gly His Gly Phe 100 105 Gly Phe Ser Ala Thr Tyr Glu Tyr Glu Gly 120 122

<210> 1040 <211> 65 <212>Amino acid <213> Homo sapiens

<210> 1041 <211> 46 <212>Amino acid <213> Homo sapiens

<210> 1042 <211> 146 <212>Amino acid <213> Homo sapiens

<400> 1042 Ala Arg Met Thr Leu Ile Pro Gly Thr His Leu Leu Glu Asn Ile His 5 10 Asn Ile Trp Val Asn Gly Val Gly Thr Asn Ser Ala Pro Phe Trp Arg 20 25 Met Leu Leu Asn Ser Phe Val Met Ala Phe Ser Ile Thr Leu Gly Lys 40 Ile Thr Val Ser Met Leu Ser Ala Phe Ala Ile Val Trp Phe Arg Phe 55 60 Pro Leu Arg Asn Leu Phe Phe Trp Met Ile Phe Ile Thr Leu Met Leu 70 75 Pro Val Glu Val Arg Ile Phe Pro Thr Val Glu Val Ile Ala Asn Leu 90 Gln Met Leu Asp Ser Tyr Ala Gly Leu Thr Leu Pro Leu Met Ala Ser 100 105 110 Ala Thr Ala Thr Phe Leu Phe Arg Lys Leu Asn Met Ser Gly Pro Asp 115 120 125 Lys Val Val Pro Ala Ala Arg Ile Ser Gly Tyr Gly Pro Arg Val Arg 135 Lys Gln 145 146

<210> 1043 <211> 133 <212>Amino acid <213> Homo sapiens

<400> 1043 Cys Ala Lys Cys Leu Arg Asp Ala Asp Glu Cys Pro Ser Gly Ala Phe 10 Glu Arg Ile Gly Arg Asp Ile Ser Leu Asp Ala Leu Glu Arg Glu Val 25 Met Lys Asp Asp Ile Phe Phe Arg Thr Ser Gly Gly Val Thr Leu 40 Ser Gly Gly Glu Val Leu Met Gln Ala Glu Phe Ala Thr Arg Phe Leu Gln Arg Leu Arg Leu Trp Gly Val Ser Cys Ala Ile Glu Thr Ala Gly 70 Asp Ala Pro Ala Ser Lys Leu Leu Pro Leu Ala Lys Leu Cys Asp Glu 85 90 Val Leu Phe Asp Leu Lys Ile Met Asp Ala Thr Gln Ala Arg Asp Val 105 Val Lys Met Asn Leu Pro Arg Val Leu Glu Asn Leu Arg Leu Leu Val 115 120 Ser Glu Gly Val Asn 130

<210> 1044 <211> 115 <212>Amino acid <213> Homo sapiens

<400> 1044
Tyr Leu Leu Phe Val Cys Phe Leu Val Met Ser Leu Leu Val Gly

10 5 Leu Val Tyr Lys Phe Thr Ala Glu Arg Ala Gly Lys Gln Ser Leu Asp 20 25 Asp Leu Met Asn Ser Ser Leu Tyr Leu Met Arg Ser Glu Leu Arg Glu 40 Ile Pro Pro His Asp Trp Gly Lys Thr Leu Lys Glu Met Asp Leu Asn 55 Leu Ser Phe Asp Leu Arg Val Glu Pro Leu Ser Lys Tyr His Leu Asp 70 75 Asp Ile Ser Met His Arg Leu Arg Gly Gly Glu Ile Val Ala Leu Asp 90 Asp Gln Tyr Thr Phe Leu Gln Arg Ile Pro Arg Ser His Tyr Val Leu 105 Ala Val Gly 115

<210> 1045 <211> 69 <212>Amino acid <213> Homo sapiens

<210> 1046 <211> 69 <212>Amino acid <213> Homo sapiens

<210> 1047 <211> 43 <212>Amino acid

<213> Homo sapiens

<210> 1048

<211> 77
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(77)
<223> X = any amino acid or stop code

<210> 1049 <211> 79 <212>Amino acid <213> Homo sapiens

<210> 1050 <211> 99 <212>Amino acid <213> Homo sapiens

<400> 1050 Leu Gln Thr Glu Ile Gly Ser Met Val Tyr Ala Val Lys Pro Gly Asp 10 Gly Ser Ala Arg Glu Gln Ala Ala Ser Cys Gln Arg Val Ile Gly Gly 20 25 Leu Ala Asn Ile Ala Glu Glu Tyr Ala Thr Lys Arg Tyr Arg Ser Asn 40 Val Ile Asn Trp Gly Met Leu Pro Leu Gln Met Ala Glu Val Pro Thr 55 Phe Glu Val Gly Asp Tyr Ile Tyr Ile Leu Gly Phe Lys Ala Ala Lys 70 75 Tyr Ser Pro Gly Thr Ala Phe Thr Val Tyr Ala Ile Ser Gly Tyr Gly 90 Pro Arg Ile 99

<210> 1051 <211> 114 <212>Amino acid <213> Homo sapiens

<400> 1051 Thr Leu Glu Asp Leu Leu Met Ala Leu Asp Gly Glu Gln His Leu Gln Gln Gln Val Ser Glu Lys Val Leu Ala Asp Asn Val Leu Ile Ala Pro 25 Gly Ser Val Lys Pro Asp Ala Thr Phe Trp Ser Ala Leu Ile Gln Asp 40 Arg Tyr Asn Val Met Thr Cys Ile Glu Lys Asp Ala Cys Val Leu Val Glu Gln Asp Leu Asn Ser Asp Gly Gln Ala Glu Arg Ile Leu Phe Ala 70 75 Phe Asn Asp Asp Arg Val Ile Val Tyr Gly Phe Asp Ser Asp Arg Lys 85 90 Glu Trp Asp Ala Leu Asp Met Ser Leu Leu Pro Asn Glu Ile Thr Lys Glu Lys 114

<210> 1052 <211> 210 <212>Amino acid <213> Homo sapiens

<400> 1052

Glu Ser Asn Ser Arg Cys Arg Lys Met Pro Gly Glu Arg Cys Arg Gly 10 Gly Pro Ala Arg Leu Ser Leu Leu Leu Asp Leu Pro Thr Arg Pro Leu Pro His Pro Arg Gln Val Ile Asp Phe Gly Ser Ala Ser Ile Phe Ser 40 Glu Val Arg Tyr Val Lys Glu Pro Tyr Ile Gln Ser Arg Phe Tyr Arg 55 Ala Pro Glu Ile Leu Leu Gly Leu Pro Phe Cys Glu Lys Val Asp Val Trp Ser Leu Gly Cys Val Met Asp Glu Leu His Leu Gly Trp Pro Leu Tyr Pro Gly Asn Asn Glu Tyr Asp Gln Val Arg Tyr Ile Cys Glu Thr 105 Gln Gly Leu Pro Lys Pro His Leu Leu His Ala Ala Cys Lys Ala His 120 His Phe Phe Lys Arg Asn Pro His Pro Asp Ala Ala Asn Pro Trp Gln 135 Leu Lys Ser Ser Ala Asp Tyr Leu Ala Glu Thr Lys Val Arg Pro Leu 150 155 Glu Arg Arg Lys Tyr Met Leu Lys Ser Leu Asp Gln Ile Glu Thr Val 170 Asn Gly Gly Ser Val Ala Ser Arg Leu Thr Phe Pro Asp Arg Glu Ala 185 Leu Ala Glu His Ala Asp Leu Lys Ser Met Val Glu Leu Met Lys Arg 200 Leu Leu 210

<210> 1053 <211> 100 <212>Amino acid <213> Homo sapiens

<210> 1054
. <211> 194
<212>Amino acid
<213> Homo sapiens

<400> 1054 Cys Gly Pro Gly Phe Ser Leu Ser Phe Phe Phe Leu Arg Trp Ser Phe 10 Ala Leu Val Ala Gln Ala Gly Val Gln Trp His Asp Leu Gly Ser Leu 20 25 Gln Pro Pro Ala Pro Gly Phe Lys Arg Phe Ser Ser Leu Ser Leu Leu 40 Ser Arg Trp Asp Tyr Arg His Ala His Ala Arg Leu Ile Phe Val Phe 55 Leu Val Glu Met Gly Phe Leu His Val Gly Gln Ala Gly Leu Glu Leu 70 75 Pro Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Arg Ile 85 90 Thr Gly Val Thr Thr Pro Leu Gly Thr Phe Phe Phe Leu Arg Trp 100 105 Ser Phe Ala Leu Val Ala Gln Ala Gly Gly Gln Cys Leu Asp Leu Gly 120 Ser Leu Gln Leu Pro Pro Pro Gly Phe Lys Arg Leu Val Cys His Phe 135 140 Gln Thr Pro Gln Lys His Arg Cys Ser Cys Gln Ala Pro Gly Asp Cys. 150 155 Leu Gln Glu Ser Phe Val Met Thr Gly Cys Val Leu Arg Thr Val Ser 165 170 Glu Ser Val Gln Arg Ala Asn Ala Gly Ala Gly Ala Glu Thr Val Gln 180 185 Gly Leu 194

<210> 1055
<211> 351
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(351)
<223> X = any amino acid or stop code

<400> 1055 Met Gly Asn Ala Ala Ala Lys Lys Gly Ser Glu Gln Glu Ser Val 10 Lys Glu Phe Leu Ala Lys Ala Lys Glu Asp Phe Leu Lys Lys Trp Glu 25 Ser Pro Ala Gln Asn Thr Ala His Leu Asp Gln Phe Glu Arg Ile Lys 40 Thr Leu Gly Thr Gly Ser Phe Gly Arg Val Met Leu Val Lys His Lys Glu Thr Gly Asn His Tyr Ala Met Lys Ile Leu Asp Xaa Gln Lys Val 70 Gly Lys Leu Lys Gln Ile Glu His Thr Leu Asn Glu Lys Arg Ile Leu 90 Gln Ala Val Asn Phe Pro Phe Leu Val Lys Leu Glu Phe Ser Phe Lys 105 Asp Asn Ser Asn Leu Tyr Met Val Met Glu Tyr Val Pro Gly Gly Glu 120 Met Phe Ser His Leu Arg Arg Ile Gly Arg Phe Ser Glu Pro His Ala 135 Arg Phe Tyr Ala Ala Gln Ile Val Leu Thr Phe Glu Tyr Leu His Ser

150 155 145 Leu Asp Leu Ile Tyr Arg Asp Leu Lys Pro Glu Asn Leu Leu Ile Asp 165 170 Gln Gln Gly Tyr Ile Gln Val Thr Asp Phe Gly Phe Ala Lys Arg Val 185 Lys Gly Arg Thr Trp Thr Leu Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Ile Ile Leu Ser Lys Gly Tyr Asn Lys Ala Val Asp Trp Trp Ala 215 Leu Gly Val Leu Ile Tyr Glu Met Ala Ala Gly Tyr Pro Pro Phe Phe 230 Ala Asp Gln Pro Ile Gln Ile Tyr Glu Lys Ile Val Ser Gly Lys Val 245 250 Arg Phe Pro Ser His Phe Ser Ser Asp Leu Lys Asp Leu Leu Arg Asn 260 265 Leu Leu Gln Val Asp Leu Thr Lys Arg Phe Gly Asn Leu Lys Asn Gly 280 Val Asn Asp Ile Lys Asn His Lys Trp Phe Ala Thr Thr Asp Trp Ile 295 300 Ala Ile Tyr Gln Arg Lys Val Glu Ala Pro Phe Ile Pro Lys Phe Lys 310 315 Gly Pro Gly Asp Thr Ser Asn Phe Asp Asp Tyr Glu Glu Glu Ile 325 330 Arg Val Ser Ile Asn Glu Lys Phe Gly Lys Glu Phe Ser Glu Phe 345 350 351

<210> 1056 <211> 136 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(136)

<223> X = any amino acid or stop code

<400> 1056

Ser Ser Ser Arg Ser Ser His Gly Asp Ser Pro Pro His Ser Gln Thr 10 Pro Cys Asp Thr Asn Arg Gly Leu Asp Thr Lys His Xaa Asp Ser Gln . 25 Ser Ile Glu Glu Lys Asp Ser Ser Gln Ser Glu Xaa Asn Arg Ile Glu 40 Arg Arg Lys Glu Val Glu Arg Ile Leu Gln Thr Asn Ser Asp Tyr Met 55 60 Xaa His Trp Ser Asn Xaa Pro Glu Asn Ile Leu Pro Lys Lys Phe Phe 70 75 Ser Lys His Gln Lys Cys Thr Ala Thr Leu Ser Met Arg Asn Thr Ser 90 Ile Met Lys Lys Glu Gly Leu Phe Xaa Ala Gln Phe Pro Ser Leu Leu 105 Leu Ser His Leu Pro Ala Val Gly Leu Gly Ile Tyr Thr Gly Thr His 120 Leu Thr Thr Ser Thr Ser Thr Phe 130 135 136

<210> 1057 <211> 79

<212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(79) <223> X = any amino acid or stop code

<210> 1058 <211> 458 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(458) <223> X = any amino acid or stop code

<400> 1058 Gly Thr Ser Gly Val Gln Glu Ile Ser Arg Leu Thr Asn Glu Asn Leu Asp Leu Lys Glu Leu Val Glu Lys Leu Glu Lys Asn Glu Arg Lys Leu Lys Lys Gln Leu Lys Ile Tyr Met Lys Lys Ala Gln Asp Leu Glu Ala Ala Gln Ala Leu Ala Gln Ser Glu Arg Lys Arg His Glu Leu Asn 55 Arg Gln Val Thr Val Gln Arg Lys Glu Lys Asp Phe Gln Gly Met Leu Glu Tyr His Lys Glu Asp Glu Ala Leu Leu Ile Arg Asn Leu Val Thr 85 90 Asp Leu Lys Pro Gln Met Leu Ser Gly Thr Val Pro Cys Leu Pro Ala 105 Tyr Ile Leu Tyr Met Cys Ile Arg His Ala Asp Tyr Thr Asn Asp Asp 120 125 Leu Lys Val His Ser Leu Leu Thr Ser Thr Ile Asn Gly Ile Lys Lys 135 140 Val Leu Lys Lys His Asn Asp Asp Phe Glu Met Thr Ser Phe Trp Leu 150 · 155 Ser Asn Thr Cys Arg Leu Leu His Cys Leu Lys Gln Tyr Ser Gly Asp 170 Glu Gly Phe Met Thr Gln Asn Thr Ala Lys Gln Asn Glu His Cys Leu 180 185

Lys Asn Phe Asp Leu Thr Glu Tyr Arg Gln Val Leu Ser Asp Leu Ser Ile Gln Ile Tyr Gln Gln Leu Ile Lys Ile Ala Glu Gly Val Leu Gln 215 220 Pro Met Ile Val Ser Ala Met Leu Glu Asn Xaa Ser Ile Gln Gly Leu 235 230 Ser Gly Val Lys Pro Thr Gly Ser Gln Lys His Ser Ser Ser Met Ala 245 250 Asp Glu Asp Asn Ser Tyr Arg Leu Glu Ala Ile Ile Arg Gln Met Asn 260 265 Ala Phe His Thr Val Met Cys Asp Gln Gly Leu Asp Pro Glu Ile Ile 280 Leu Gln Val Phe Lys Gln Leu Phe Tyr Met Ile Asn Ala Val Thr Leu 295 300 Asn Asp Leu Leu Leu Arg Lys Asp Val Cys Ser Trp Ser Thr Gly Met 310 315 Gln Leu Arg Tyr Asn Ile Ser Gln Leu Glu Glu Trp Leu Arg Gly Arg 325 330 Asn Leu His Gln Ser Gly Ala Val Gln Thr Met Glu Pro Leu Ile Gln 340 345 Ala Ala Gln Leu Leu Gln Leu Lys Lys Lys Thr Gln Glu Asp Ala Glu 360 365 Ala Ile Cys Ser Leu Cys Thr Ser Leu Ser Thr Gln Gln Ile Val Lys 375 380 Ile Leu Asn Leu Tyr Thr Pro Leu Asn Glu Phe Glu Glu Arg Val Thr 390 395 Val Ala Phe Ile Arg Thr Ile Gln Ala Gln Leu Gln Glu Arg Asn Asp 410 Pro Gln Gln Leu Leu Asp Ala Lys His Met Phe Pro Val Leu Phe 425 Pro Phe Asn Pro Ser Ser Leu Thr Met Asp Ser Ile His Ile Pro Ala 435 440 Cys Leu Asn Leu Glu Phe Leu Asn Glu Val 455

<210> 1059 <211> 82 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(82) <223> X = any amino acid or stop code

<210> 1060 <211> 277 <212>Amino acid <213> Homo sapiens

<400> 1060 Gly Thr Thr Asp Glu Ile Met Thr Arg Trp Ala Arg Val Ser Thr Thr 10 Tyr Asn Lys Arg Pro Leu Pro Ala Thr Ser Trp Glu Asp Met Lys Lys . 20 25 Gly Ser Phe Glu Gly Thr Ser Gln Asn Leu Pro Lys Arg Lys Gln Leu Glu Ala Asn Arg Leu Ser Leu Lys Asn Asp Ala Pro Gln Ala Lys His Lys Lys Asn Lys Lys Lys Glu Tyr Leu Asn Glu Asp Val Asn Gly 70 Phe Met Glu Tyr Leu Arg Gln Asn Ser Gln Met Val His Asn Gly Gln 85 90 Ile Ile Ala Thr Asp Ser Glu Glu Val Arg Glu Glu Ile Ala Val Ala 100 105 Leu Lys Lys Asp Ser Arg Arg Glu Gly Arg Arg Leu Lys Arg Gln Ala 120 Ala Lys Lys Asn Ala Met Val Cys Phe His Cys Arg Lys Pro Gly His 135 140 Gly Ile Ala Asp Cys Pro Ala Ala Leu Glu Asn Gln Asp Met Gly Thr 150 155 Gly Ile Cys Tyr Arg Cys Gly Ser Thr Glu His Glu Ile Thr Lys Cys 165 170 Lys Ala Lys Val Asp Pro Ala Leu Gly Glu Phe Pro Phe Ala Lys Cys 185 Phe Val Cys Gly Glu Met Gly His Leu Ser Arg Ser Cys Pro Asp Asn 200 195 Pro Lys Gly Leu Tyr Ala Asp Gly Gly Gly Cys Lys Leu Cys Gly Ser 215 220 Val Glu His Leu Lys Lys Asp Cys Pro Glu Ser Gln Asn Ser Glu Arg 235 230 Met Val Thr Val Gly Arg Trp Ala Lys Gly Met Ser Ala Asp Tyr Glu 250 255 245 Glu Ile Leu Asp Val Pro Lys Pro Gln Lys Pro Lys Thr Lys Ile Pro 260 265 Lys Val Val Asn Phe 275 277

<211> 95
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(95)
<223> X = any amino acid or stop code

<400> 1061

<210> 1061

<210> 1062 <211> 259 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(259) <223> X = any amino acid or stop code

<400> 1062 Ser Asp Ala Trp Ala Asp Ala Trp Ala Arg Ser Leu Ser Val Ser Pro 10 Ser Ser Tyr Pro Glu Leu His Thr Glu Val Pro Leu Ser Val Leu Ile 20 25 Leu Gly Leu Leu Val Val Phe Ile Leu Ser Val Cys Phe Gly Ala Gly 40 Leu Phe Val Phe Val Leu Lys Arg Arg Lys Gly Val Pro Ser Val Pro 55 Arg Asn Thr Asn Asn Leu Asp Val Ser Ser Phe Gln Leu Gln Tyr Gly 75 Ser Tyr Asn Thr Glu Thr His Asp Lys Thr Asp Gly His Val Tyr Asn Tyr Ile Pro Pro Pro Val Val Gln Met Cys Gln Asn Pro Ile Tyr Met 105 Ala Gly Arg Glu Gly Arg Pro Ser Ser Leu Leu Pro Lys Pro Gly Lys 115 120 Glu Phe Gln Leu Leu Gly Asn Leu Glu Glu Lys Lys Glu Glu Pro Ala 135 Thr Pro Ala Tyr Thr Ile Ser Ala Thr Glu Leu Leu Glu Lys Gln Ala 150 155 160 Thr Pro Arg Glu Pro Glu Leu Leu Tyr Gln Asn Ile Ala Glu Pro Ser 165 170 Gln Gly Thr Ser Thr Ala Gln Ala Xaa Ser Thr Ile Thr Phe Val Pro 185 Tyr Leu Lys Gly Gln Phe Ala Pro Ser Tyr Glu Ser Arg Arg Gln Asn 200 205 Gln Asp Arg Ile Asn Lys Thr Val Leu Tyr Gly Thr Pro Arg Lys Cys 215 Phe Val Gly Gln Ser Lys Pro Asn His Pro Leu Leu Gln Ala Lys Pro 230 235 Gln Ser Glu Pro Asp Tyr Leu Glu Val Leu Glu Lys Gln Thr Ala Ile 245 250 Ser Gln Leu

<210> 1063 <211> 498 <212>Amino acid <213> Homo sapiens

<400> 1063 Ala Leu Cys His Ile Ala Val Gly Gln Gln Met Asn Leu His Trp Leu 10 His Lys Ile Gly Leu Val Val Ile Leu Ala Ser Thr Val Val Ala Met 20 25 Ser Ala Val Ala Gln Leu Trp Glu Asp Glu Trp Glu Val Leu Leu Ile 40 Ser Leu Gln Gly Thr Ala Pro Phe Leu His Val Gly Ala Val Ala Ala Val Thr Met Leu Ser Trp Ile Val Ala Gly Gln Phe Ala Arg Ala Glu 70 75 Arg Thr Ser Ser Gln Val Thr Ile Leu Cys Thr Phe Phe Thr Val Val 90 Phe Ala Leu Tyr Leu Ala Pro Leu Thr Ile Ser Ser Pro Cys Ile Met 105 Glu Lys Lys Asp Leu Gly Pro Lys Pro Ala Leu Ile Gly His Arg Gly 120 125 Ala Pro Met Leu Ala Pro Glu His Thr Leu Met Ser Phe Arg Lys Ala 135 140 Leu Glu Gln Lys Leu Tyr Gly Leu Gln Ala Asp Ile Thr Ile Ser Leu 150 155 Asp Gly Val Pro Phe Leu Met His Asp Thr Thr Leu Arg Arg Thr Thr 165 170 Asn Val Glu Glu Phe Pro Glu Leu Ala Arg Arg Pro Ala Ser Met 180 185 Leu Asn Trp Thr Thr Leu Gln Arg Leu Asn Ala Gly Gln Trp Phe Leu 200 195 205 Lys Thr Asp Pro Phe Trp Thr Ala Ser Ser Leu Ser Pro Ser Asp His 215 220 Arg Glu Ala Gln Asn Gln Ser Ile Cys Ser Leu Ala Glu Leu Leu Glu 230 235 Leu Ala Lys Gly Asn Ala Thr Leu Leu Leu Asn Leu Arg Asp Pro Pro 245 250 Arg Glu His Pro Tyr Arg Ser Ser Phe Ile Asn Val Thr Leu Glu Ala 265 Val Leu His Ser Gly Phe Pro Gln His Gln Val Met Trp Leu Pro Ser 280 Arg Gln Arg Pro Leu Val Arg Lys Val Ala Pro Gly Phe Gln Gln Thr 295 Ser Gly Ser Lys Glu Ala Val Ala Ser Leu Arg Arg Gly His Ile Gln 310 Arg Leu Asn Leu Arg Tyr Thr Gln Val Ser Arg Gln Glu Leu Arg Asp 325 330 Tyr Ala Ser Trp Asn Leu Ser Val Asn Leu Tyr Thr Val Asn Ala Pro 340 345 Trp Leu Phe Ser Leu Leu Trp Cys Ala Gly Val Pro Ser Val Thr Ser 360 Asp Asn Ser His Thr Leu Ser Gln Val Pro Ser Pro Leu Trp Ile Met 375 . 380 Pro Pro Asp Glu Tyr Cys Leu Met Trp Val Thr Ala Asp Leu Val Ser 390 395 Phe Thr Leu Ile Val Gly Ile Phe Val Leu Gln Lys Trp Arg Leu Gly 410 Gly Ile Arg Ser Tyr Asn Pro Glu Gln Ile Met Leu Ser Ala Ala Val

420 425 430 Arg Arg Thr Ser Arg Asp Val Ser Ile Met Lys Glu Lys Leu Ile Phe 440 445 Ser Glu Ile Ser Asp Gly Val Glu Val Ser Asp Val Leu Ser Val Cys 455 460 Ser Asp Asn Ser Tyr Asp Thr Tyr Ala Asn Ser Thr Ala Thr Pro Val 470 475 Gly Pro Arg Gly Gly Ser His Thr Lys Thr Leu Ile Glu Arg Ser 485 490 Gly Arg 498

<210> 1064 <211> 374 <212>Amino acid <213> Homo sapiens

<400> 1064

Asn Ser Ala Asp Tyr Gly Asp Gly Pro Asp Ser Ser Asp Ala Asp Pro 10 Asp Ser Gly Thr Glu Glu Gly Val Leu Asp Phe Ser Asp Pro Phe Ser Thr Glu Val Lys Pro Arg Ile Leu Leu Met Gly Leu Arg Arg Ser Gly Lys Ser Ser Ile Gln Lys Val Val Phe His Lys Met Ser Pro Asn Glu 50 . 55 Thr Leu Phe Leu Glu Ser Thr Asn Lys Ile Cys Arg Glu Asp Val Ser 65 70 Asn Ser Ser Phe Val Asn Phe Gln Ile Trp Asp Phe Pro Gly Gln Ile 8.5 90 Asp Phe Phe Asp Pro Thr Phe Asp Tyr Glu Met Ile Phe Arg Gly Thr 100 105 110 Gly Ala Leu Ile Phe Val Ile Asp Ser Gln Asp Asp Tyr Met Glu Ala 125 120 Leu Ala Arg Leu His Leu Thr Val Thr Arg Ala Tyr Lys Val Asn Thr 135 140 Asp Ile Asn Phe Glu Val Phe Ile His Lys Val Asp Gly Leu Ser Asp 150 155 Asp His Lys Ile Glu Thr Gln Arg Asp Ile His Gln Arg Ala Asn Asp 170 Asp Leu Ala Asp Ala Gly Leu Glu Lys Ile His Leu Ser Phe Tyr Leu 180 185 Thr Ser Ile Tyr Asp His Ser Ile Phe Glu Ala Phe Ser Lys Val Val 200 Gln Lys Leu Ile Pro Gln Leu Pro Thr Leu Glu Asn Leu Leu Asn Ile 215 220 Phe Ile Ser Asn Ser Gly Ile Glu Lys Ala Phe Leu Phe Asp Val Val 235 230 Ser Lys Ile Tyr Ile Ala Thr Asp Ser Thr Pro Val Asp Met Gln Thr 245 250 Tyr Glu Leu Cys Cys Asp Met Ile Asp Val Val Ile Asp Ile Ser Cys 260 265 Ile Tyr Gly Leu Lys Glu Asp Gly Ala Gly Thr Pro Tyr Asp Lys Glu 280 Ser Thr Ala Ile Ile Lys Leu Asn Asn Thr Thr Val Leu Tyr Leu Lys 295 300 Glu Val Thr Lys Phe Leu Ala Leu Val Cys Phe Val Arg Glu Glu Ser 310 315 Phe Glu Arg Lys Gly Leu Ile Asp Tyr Asn Phe His Cys Phe Arg Lys

<210> 1065 <211> 278 <212>Amino acid <213> Homo sapiens

<400> 1065 Arg Thr Arg Gly Arg Asp Pro Gly Ala Gly Phe Arg Arg Thr Ala Asn 10 Lys Arg Cys Cys Arg Arg Phe Leu Ile Gly Cys Gly Trp Leu Pro 25 Leu Arg Ser Asp Trp Pro Leu Val Ser Lys Met Leu Ser Lys Gly Leu 40 Lys Arg Lys Arg Glu Glu Glu Glu Lys Glu Pro Leu Ala Val Asp 55 Ser Trp Trp Leu Asp Pro Gly His Ala Ala Val Ala Gln Ala Pro Pro 70 75 Ala Val Ala Ser Ser Ser Leu Phe Asp Leu Ser Val Leu Lys Leu His 85 90 His Ser Leu Gln Gln Ser Glu Pro Asp Leu Arg His Leu Val Leu Val 105 Val Asn Thr Leu Arg Arg Ile Gln Ala Ser Met Ala Pro Ala Ala Ala 120 Leu Pro Pro Val Pro Ser Pro Pro Ala Ala Pro Ser Val Ala Asp Asn 135 140 Leu Leu Ala Ser Ser Asp Ala Ala Leu Ser Ala Ser Met Ala Ser Leu 150 155 Leu Glu Asp Leu Ser His Ile Glu Gly Leu Ser Gln Ala Pro Gln Pro 165 170 Leu Ala Asp Glu Gly Pro Pro Gly Arg Ser Ile Gly Gly Ala Ala Pro 185 Ser Leu Gly Ala Leu Asp Leu Leu Gly Pro Ala Thr Gly Cys Leu Leu 200 Asp Asp Gly Leu Glu Gly Leu Phe Glu Asp Ile Asp Thr Ser Met Tyr 215 220 Asp Asn Glu Leu Trp Ala Pro Ala Ser Glu Gly Leu Lys Pro Gly Pro 230 235 Glu Asp Gly Pro Gly Lys Glu Glu Ala Pro Glu Leu Asp Glu Ala Glu 245 250 Leu Asp Tyr Leu Met Asp Val Leu Val Gly Thr Gln Ala Leu Glu Arg 260 265 Pro Pro Gly Pro Gly Arg

<210> 1066 <211> 502 <212>Amino acid <213> Homo sapiens <220> <221> misc feature

<222> (1)...(502) <223> X = any amino acid or stop code

<400> 1066 Leu Gln Glu Val Lys Ala Arg Arg Asn Thr Leu His Lys Glu Lys Asp His Leu Val Asn Asp Tyr Glu Gln Asn Met Lys Leu Leu Gln Thr Lys Tyr Asp Ala Asp Ile Asn Leu Leu Lys Gln Glu His Ala Leu Ser Ala 40 Ser Lys Ala Ser Ser Met Ile Glu Glu Leu Glu Gln Asn Val Cys Gln 55 Leu Lys Gln Gln Leu Gln Glu Ser Glu Leu Gln Arg Lys Gln Gln Leu 75 Arg Asp Gln Glu Asn Lys Phe Gln Met Glu Lys Ser His Leu Lys His 90 Ile Tyr Glu Lys Lys Ala His Asp Leu Gln Ser Glu Leu Asp Lys Gly 105 Lys Glu Asp Thr Gln Lys Lys Ile His Lys Phe Glu Glu Ala Leu Lys 120 Trp Lys Lys Trp Arg Gln Ile Xaa Leu Asp Pro Asn Leu Leu Arg Glu 135 140 Lys Gln Ser Lys Glu Phe Leu Trp Gln Leu Glu Asp Ile Arg Gln Arg 150 155 Tyr Glu Gln Gln Ile Val Glu Leu Lys Leu Glu His Glu Gln Glu Lys 165 170 Thr His Leu Leu Gln Gln His Asn Ala Glu Lys Asp Ser Leu Val Arg 185 Asp His Glu Arg Glu Ile Glu Asn Leu Glu Lys Gln Leu Arg Ala Ala 200 Asn Met Glu His Glu Asn Gln Ile Gln Glu Phe Lys Lys Arg Asp Ala 215 220 Gln Val Ile Ala Asp Met Glu Ala Gln Val His Lys Leu Arg Glu Glu 230 235 Leu Ile Asn Val Asn Ser Gln Arg Lys Gln Gln Leu Val Glu Leu Gly 250 Leu Leu Arg Glu Glu Glu Lys Gln Arg Ala Thr Arg Glu His Glu Ile 265 Val Val Asn Lys Leu Lys Ala Glu Ser Glu Lys Met Lys Ile Glu Leu 280 Lys Lys Thr His Ala Ala Glu Thr Glu Met Thr Leu Glu Lys Ala Asn 295 Ser Lys Leu Lys Gln Ile Glu Lys Glu Tyr Thr Gln Lys Leu Ala Lys 310 Ser Ser Gln Ile Ile Ala Glu Leu Gln Thr Thr Ile Ser Ser Leu Lys 330 Glu Glu Asn Ser Gln Gln Leu Ala Ala Glu Arg Arg Leu Gln Asp 345 Val Arg Gln Lys Phe Glu Asp Glu Lys Lys Gln Leu Ile Arg Asp Asn 360 Asp Gln Ala Ile Lys Val Leu Gln Asp Glu Leu Glu Asn Arg Ser Asn 375 Gln Val Arg Cys Ala Glu Lys Lys Leu Gln His Lys Glu Leu Glu Ser 390 395 Gln Glu Gln Ile Thr Tyr Ile Arg Gln Glu Tyr Glu Thr Lys Leu Lys 410 Gly Leu Met Pro Ala Ser Leu Arg Gln Glu Leu Glu Asp Thr Ile Ser 425 Ser Leu Lys Ser Gln Val Asn Phe Leu Gln Lys Arg Ala Ser Ile Leu 435 440 445

Gln Glu Glu Arg Asp Tyr Ile Ser Arg Gln Lys Val Gln Pro Ile Ser 450

Arg Xaa Leu His Glu Arg Met Gln Arg Met Arg Ile Ser Arg Leu Cys 465

Cys Gly Thr Ser Ser Ser Arg Phe Glu Asp Leu Asp Ile Val Asn Cys 485

Glu Ile Ser Gly Ile Phe 500 502

<210> 1067 <211> 301 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1) ... (301) <223> X = any amino acid or stop code

<400> 1067 Val Ile Asn Leu Val Tyr Leu Ile Ser Ser Pro Arg Pro Glu Leu Lys 10 Pro Val Asp Lys Glu Ser Glu Val Val Met Lys Phe Pro Asp Gly Phe Glu Lys Phe Ser Pro Pro Ile Leu Gln Leu Asp Glu Val Asp Phe Tyr 40 Tyr Asp Pro Lys His Val Ile Phe Ser Arg Leu Ser Val Ser Ala Asp 55 Leu Glu Ser Arg Ile Cys Val Val Gly Glu Asn Gly Ala Gly Lys Ser 70 Thr Met Leu Lys Leu Leu Cly Asp Leu Ala Pro Val Arg Gly Ile 90 Arg His Ala His Arg Asn Leu Lys Ile Gly Tyr Phe Ser Gln His His 105 Val Glu Gln Leu Asp Leu Asn Val Gln Cys Leu Trp Glu Leu Ala Gly 120 125 His Ala Ser Phe Pro Gly Arg Pro Glu Glu Glu Tyr Arg His Gln Leu 135 Gly Phe Gly Met Gly Ile Ser Gly Glu Leu Ala Met Arg Pro Leu Cys 150 Gln Pro Val Leu Gly Ala Arg Lys Lys Pro Lys Trp Pro Phe Ala Gln 165 170 Met Asp Tyr Cys Pro Ala Pro Thr Phe Tyr Ile Leu Asp Glu Pro Thr 180 185 Asn His Leu Gly His Gly Arg Ala Ile Glu Ala Leu Gly Pro Cys Leu 200 205 Gln Thr Ile Ser Gly Val Gly Val Ile Leu Val Ser His Glu Xaa Ser 215 220 Ala Leu Ser Arg Leu Val Cys Arg Glu Leu Trp Val Cys Xaa Gly Gly 230 235 Gly Val Thr Arg Val Glu Arg Lys Asp Phe Asp Gln Tyr Arg Ala Leu 250 Leu Gln Gly Thr Val Ser Ala Arg Glu Gly Phe Pro Leu Gly Pro Pro 265 270 Arg Leu Lys Asp Ser Pro Arg Asp Met Gly Leu Val Ser Gln Thr Pro 280 Trp Gly His His Val Gly Tyr Pro Leu Pro Gly Arg Gly 295

<210> 1068 <211> 215 <212>Amino acid <213> Homo sapiens

<400> 1068 Cys Ser Ala Val Glu Val Lys Met Ala Ala Arg Thr Ala Phe Gly Ala Val Cys Arg Arg Leu Trp Gln Gly Leu Gly Asn Phe Ser Val Asn Thr Ser Lys Gly Asn Thr Ala Lys Asn Gly Gly Leu Leu Leu Ser Thr Asn Met Lys Trp Val Gln Phe Ser Asn Leu His Val Asp Val Pro Lys Asp 55 Leu Thr Lys Pro Val Val Thr Ile Ser Asp Glu Pro Asp Ile Leu Tyr 70 Lys Arg Leu Ser Val Leu Val Lys Gly His Asp Lys Ala Val Leu Asp 85 90 Ser Tyr Glu Tyr Phe Ala Val Leu Ala Ala Lys Glu Leu Gly Ile Ser 100 105 Ile Lys Val His Glu Pro Pro Arg Lys Ile Glu Arg Phe Thr Leu Leu 120 125 Gln Ser Val His Ile Tyr Lys Lys His Arg Val Gln Tyr Glu Met Arg 140 135 Thr Leu Tyr Arg Cys Leu Glu Leu Glu His Leu Thr Gly Ser Thr Ala 150 155 Asp Val Tyr Leu Glu Tyr Ile Gln Arg Asn Leu Pro Glu Gly Val Ala 170 Met Glu Val Thr Lys Phe Cys Phe Phe Ile Phe Leu Thr Gln Leu Glu 185 190 Gln Leu Pro Glu His Ile Lys Glu Pro Ile Trp Glu Thr Leu Ser Glu 200 Glu Lys Glu Glu Ser Lys Ser 210

<210> 1069 <211> 274 <212>Amino acid <213> Homo sapiens

<221> misc_feature

<222> (1)...(274)<223> X = any amino acid or stop code

Gly Gly Ala Ile Pro Ala Pro Gly Cys Xaa Gln Phe Thr Gly Asp Leu 70 Pro Ser Tyr Ile Ser Ser Ser Ile Pro Arg Ala Gly Asn Leu Gln Xaa 85 · Leu Val Leu Pro Pro Thr Ile Arg Tyr Asn Pro Trp Leu Val Ala Cys 100 105 Ile Leu Pro Thr Leu Xaa Arg Ser Gln Leu Ser Arg Pro Ala Leu Phe 125 115 120 Pro Arg His Arg Ser Leu Leu Thr Glu Leu Phe Leu Gly Pro Val Ser 135 Gln Ser Ser Leu Pro Ile Pro Leu Ser Gly Met Lys Ala Ser Ser Gly 150 155 Pro Pro Leu Gln Thr Phe Phe Pro Ser Leu Asp Arg Gln Thr Asn Val 170 165 Leu Pro Ser Leu Tyr Ala Asp Ile Asn Val Thr Gln Lys Ser Phe Asn 180 185 Phe Ala Lys Lys Phe Ser Leu Pro Leu Tyr Phe Val Ser Ala Ala Asp 200 Gly Thr Asn Val Val Lys Leu Phe Asn Asp Ala Ile Arg Leu Ala Val 215 220 Ser Tyr Lys Gln Asn Ser Gln Asp Phe Met Asp Glu Ile Phe Gln Glu 230 235 Leu Glu Asn Phe Ser Leu Glu Glu Glu Glu Asp Val Pro Asp Gln 245 250 Glu Gln Ser Ser Ser Ile Glu Thr Pro Ser Glu Glu Val Ala Ser Pro 265 His Ser 274

<210> 1070 <211> 368 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(368)

<223> X = any amino acid or stop code

<400> 1070 Gly Ala Thr Pro Leu Gly Ser Val Gly Gly Arg Thr Gly Lys Met Asp Ala Ala Thr Leu Thr Tyr Asp Thr Leu Arg Phe Ala Glu Phe Glu Asp 20 25 Phe Pro Glu Thr Ser Glu Pro Val Trp Ile Leu Gly Arg Lys Tyr Ser 40 Ile Phe Thr Glu Lys Asp Glu Ile Leu Ser Asp Val Ala Ser Arg Leu 55 Trp Phe Thr Tyr Arg Lys Asn Phe Pro Ala Ile Gly Gly Thr Gly Pro 70 Thr Ser Asp Thr Gly Trp Gly Cys Met Leu Arg Cys Gly Gln Met Ile 90 Phe Ala Gln Ala Leu Val Cys Arg His Leu Gly Arg Asp Trp Arg Trp 100 105 110 Thr Gln Arg Lys Arg Gln Pro Asp Ser Tyr Phe Ser Val Leu Asn Ala 120 125 Phe Ile Asp Arg Lys Asp Ser Tyr Tyr Ser Ile His Gln Ile Ala Gln 135 Met Gly Val Gly Glu Gly Lys Ser Ile Gly Gln Trp Tyr Gly Pro Asn

150 155 Thr Val Ala Gln Val Leu Lys Lys Leu Ala Val Phe Asp Thr Trp Ser 165 170 Ser Leu Ala Val His Ile Ala Met Asp Asn Thr Val Val Met Glu Glu 180 185 Ile Arg Arg Leu Cys Arg Thr Ser Val Pro Cys Ala Gly Ala Thr Ala 200 Phe Pro Ala Asp Ser Asp Arg His Cys Asn Gly Phe Pro Ala Gly Ala 215 220 Glu Val Thr Asn Arg Pro Ser Pro Trp Arg Pro Leu Val Leu Leu Ile 230 235 Pro Leu Arg Leu Gly Leu Thr Asp Ile Asn Glu Ala Tyr Val Glu Thr 245 250 Leu Lys His Cys Phe Met Met Pro Gln Ser Leu Gly Val Ile Gly Gly 260 265 Lys Pro Asn Ser Ala His Tyr Phe Ile Gly Xaa Val Gly Glu Glu Leu 280 Ile Tyr Leu Asp Pro His Thr Thr Gln Pro Ala Val Glu Pro Thr Asp 295 300 Gly Cys Phe Ile Pro Asp Glu Ser Phe His Cys Gln His Pro Pro Cys 310 315 Arg Met Ser Ile Ala Glu Leu Asp Pro Ser Ile Ala Val Val Arg Gly 325 330 Gly His Leu Ser Thr Gln Ala Phe Gly Ala Glu Cys Cys Leu Gly Met 345 Thr Arg Lys Thr Phe Gly Phe Leu Arg Phe Phe Phe Ser Met Leu Gly 360

<210> 1071 <211> 81 <212>Amino acid <213> Homo sapiens

<210> 1072 <211> 494 <212>Amino acid <213> Homo sapiens

<400> 1072 Thr Arg Leu Ala Glu Phe Gly Thr Arg Asp Pro Cys Ala Gln Ala Pro Cys Glu Gln Gln Cys Glu Pro Gly Gly Pro Gln Gly Tyr Ser Cys His Cys Arg Leu Gly Phe Arg Pro Ala Glu Asp Asp Pro His Arg Cys Val Asp Thr Asp Glu Cys Gln Ile Ala Gly Val Cys Gln Gln Met Cys Val Asn Tyr Val Gly Gly Phe Glu Cys Tyr Cys Ser Glu Gly His Glu Leu Glu Ala Asp Gly Ile Ser Cys Ser Pro Ala Gly Ala Met Gly Ala Gln Ala Ser Gln Asp Leu Gly Asp Glu Leu Leu Asp Asp Gly Glu Asp Glu Glu Asp Glu Asp Glu Ala Trp Lys Ala Phe Asn Gly Gly Trp Thr Glu Met Pro Gly Ile Leu Trp Met Glu Pro Thr Gln Pro Pro Asp Phe Ala Leu Ala Tyr Arg Pro Ser Phe Pro Glu Asp Arg Glu Pro Gln Ile Pro Tyr Pro Glu Pro Thr Trp Pro Pro Pro Leu Ser Ala Pro Arg Val Pro Tyr His Ser Ser Val Leu Ser Val Thr Arg Pro Val Val Val Ser Ala Thr His Pro Thr Leu Pro Ser Ala His Gln Pro Pro Val Ile Pro Ala Thr His Pro Ala Leu Ser Arg Asp His Gln Ile Pro Val Ile Ala Ala Asn Tyr Pro Asp Leu Pro Ser Ala Tyr Gln Pro Gly Ile Leu Ser Val Ser His Ser Ala Gln Pro Pro Ala His Gln Pro Pro Met Ile Ser Thr Lys Tyr Pro Glu Leu Phe Pro Ala His Gln Ser Pro Met Phe Pro Asp Thr Arg Val Ala Gly Thr Gln Thr Thr His Leu Pro Gly Ile Pro Pro Asn His Ala Pro Leu Val Thr Thr Leu Gly Ala Gln Leu Pro Pro Gln Ala Pro Asp Ala Leu Val Leu Arg Thr Gln Ala Thr Gln Leu Pro Ile Ile Pro Thr Ala Gln Pro Ser Leu Thr Thr Thr Ser Arg Ser Pro Val Ser Pro Ala His Gln Ile Ser Val Pro Ala Ala Thr Gln Pro Ala Ala Leu Pro Thr Leu Leu Pro Ser Gln Ser Pro Thr Asn Gln Thr Ser Pro Ile Ser Pro Thr His Pro His Ser Lys Ala Pro Gln Ile Pro Arg Glu Asp Gly Pro Ser Pro Lys Leu Ala Leu Trp Leu Pro Ser Pro Ala Pro Thr Ala Ala Pro Thr Ala Leu Gly Glu Ala Gly Leu Ala Glu His Ser Gln Arg Asp Asp Arg Trp Leu Leu Val Ala Leu Leu Val Pro Thr Cys Val Phe Leu Val Val Leu Leu Ala Leu Gly Ile Val Tyr Cys Thr Arg Cys Gly Pro His Ala Pro Asn Lys Arg Ile Thr Asp Cys Tyr Arg Trp Val Ile His Ala Gly Ser Lys Ser Pro Thr Glu Pro Met Pro Pro Arg Gly Ser Leu Thr Gly Val Gln Thr Cys Arg Thr Ser Val

<210> 1073 <211> 468 <212>Amino acid <213> Homo sapiens

<400> 1073 Leu Arg Val Arg Arg Pro His Leu Pro Ala Pro Pro Ala Leu Arg 10 Ala Arg Arg Ser Asp Arg Arg Ser Ser Arg Ala Pro Ala Ala Phe Pro Pro Arg Pro Pro His Ala Ser Pro Ala Pro Gly Pro Ala Met Ala Gln 40 Ala Val Trp Ser Arg Leu Gly Arg Ile Leu Trp Leu Ala Cys Leu Leu Pro Trp Ala Pro Ala Gly Val Ala Ala Gly Leu Tyr Glu Leu Asn Leu 70 Thr Thr Asp Ser Pro Ala Thr Thr Gly Ala Val Val Thr Ile Ser Ala 85 90 Ser Leu Val Ala Lys Asp Asn Gly Ser Leu Ala Leu Pro Ala Asp Ala 100 105 110 His Leu Tyr Arg Phe His Trp Ile His Thr Pro Leu Val Leu Thr Gly 120 125 Lys Met Glu Lys Gly Leu Ser Ser Thr Ile Arg Val Val Gly His Val 135 140 Pro Gly Glu Phe Pro Val Ser Val Trp Val Thr Ala Ala Asp Cys Trp 150 155 Met Cys Gln Pro Val Ala Arg Gly Phe Val Val Leu Pro Ile Thr Glu 165 170 175 Phe Leu Val Gly Asp Leu Val Val Thr Gln Asn Thr Ser Leu Pro Trp 180 185 Pro Ser Ser Tyr Leu Thr Lys Thr Val Leu Lys Val Ser Phe Leu Leu 200 His Asp Pro Ser Asn Phe Leu Lys Thr Ala Leu Phe Leu Tyr Ser Trp 215 Asp Phe Gly Asp Gly Thr Gln Met Val Thr Glu Asp Ser Val Val Tyr 235 230 Tyr Asn Tyr Ser Ile Ile Gly Thr Phe Thr Val Lys Leu Lys Val Val 250 , 255 Ala Glu Trp Glu Glu Val Glu Pro Asp Ala Thr Arg Ala Val Lys Gln 265 270 Lys Thr Gly Asp Phe Ser Ala Ser Leu Lys Leu Gln Glu Thr Leu Arg 280 Gly Ile Gln Val Leu Gly Pro Thr Leu Ile Gln Thr Phe Gln Lys Met 295 Thr Val Thr Leu Asn Phe Leu Gly Ser Pro Pro Leu Thr Val Cys Trp 310 315 320 Arg Leu Lys Pro Glu Cys Leu Pro Leu Glu Glu Gly Glu Cys His Pro 325 Val Ser Val Ala Ser Thr Ala Tyr Asn Leu Thr His Thr Phe Arg Asp 345 Pro Gly Asp Tyr Cys Phe Ser Ile Arg Ala Glu Asn Ile Ile Ser Lys 360 Thr His Gln Tyr His Lys Ile Gln Val Trp Pro Ser Arg Ile Gln Pro 375 380 Ala Val Phe Ala Phe Pro Cys Ala Thr Leu Ile Thr Val Met Leu Ala 390 395 Phe Ile Met Tyr Met Thr Leu Arg Asn Ala Thr Gln Gln Lys Asp Met 405 410 Val Glu Asn Pro Glu Pro Pro Ser Gly Val Arg Cys Cys Cys Gln Met

 Cys
 Gly
 Pro
 Phe
 Leu
 Glu
 Thr
 Pro
 Ser
 Glu
 Tyr
 Leu
 Glu
 Ile

 Val
 Arg
 Glu
 Asn
 His
 Gly
 Leu
 Leu
 Pro
 Pro
 Leu
 Tyr
 Lys
 Ser
 Val
 Lys

 Thr
 Tyr
 Thr
 Val
 V

<210> 1074 <211> 288 <212>Amino acid <213> Homo sapiens

<400> 1074 Val Val Glu Phe Ala Phe Gln Leu Ser Ser Val Ser Val Cys Leu Thr 10 Val Ser Phe Gly Trp Gln Leu Gly Thr Val Ser Ser Cys Leu Ser Arg 25 Asp Trp Phe Leu Lys Gly Asn Leu Leu Ile Ile Ile Val Ser Val Leu Ile Ile Leu Pro Leu Ala Leu Met Lys His Leu Gly Tyr Leu Gly Tyr 55 Thr Ser Gly Leu Ser Leu Thr Cys Met Leu Phe Phe Leu Val Ser Val Ile Tyr Lys Lys Phe Gln Leu Gly Cys Ala Ile Gly His Asn Glu Thr 8.5 90 Ala Met Glu Ser Glu Ala Leu Val Gly Leu Pro Ser Gln Gly Leu Asn 105 110 Ser Ser Cys Glu Ala Gln Met Phe Thr Val Asp Ser Gln Met Ser Tyr 120 125 Thr Val Pro Ile Met Ala Phe Ala Phe Val Cys His Pro Glu Val Leu 130 135 Pro Ile Tyr Thr Glu Leu Cys Arg Pro Ser Lys Arg Arg Met Gln Ala 150 Val Ala Asn Val Ser Ile Gly Ala Met Phe Cys Met Tyr Gly Leu Thr 165 170 Ala Thr Phe Gly Tyr Leu Thr Phe Tyr Ser Ser Val Lys Ala Glu Met 180 185 190 Leu His Met Tyr Ser Gln Lys Asp Pro Leu Ile Leu Cys Val Arg Leu 205 200 Ala Val Leu Leu Ala Val Thr Leu Thr Val Pro Val Val Leu Phe Pro 215 220 Ile Arg Arg Ala Leu Gln Gln Leu Leu Phe Pro Gly Lys Ala Phe Ser 230 235 Trp Pro Arg His Val Ala Ile Ala Leu Ile Leu Leu Val Leu Val Asn 245 250 Val Leu Val Ile Cys Val Pro Thr Ile Arg Asp Ile Phe Gly Val Ile 265 270 Gly Ser Thr Ser Ala Pro Ser Leu Ile Phe Ile Leu Pro Ser Cys Ile 280 285

<210> 1075 <211> 273 <212>Amino acid <213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(273)
<223> X = any amino acid or stop code

<400> 1075 Gly Ala Gly Ser Lys Ser Ser Met Met Gln Leu Met His Leu Glu Ser 10 Phe Tyr Glu Lys Pro Pro Pro Gly Leu Ile Lys Glu Asp Asp Thr Lys 20 2.5 Pro Glu Asp Cys Ile Pro Asp Val Pro Gly Asn Glu His Ala Arg Glu 40 Phe Leu Ala His Thr Pro Thr Lys Gly Leu Trp Met Pro Leu Glu Lys 55 Glu Val Lys Val Lys His Cys Thr Phe His Trp Ile Ala Ser Xaa Phe 70 75 Leu Gly Asp Gly Lys Phe Ile Pro Lys Ala Thr Arg Leu Lys Asp Val Trp Val Ser Asn Xaa Phe Thr Cys Leu Phe Trp Asp Leu Thr Arg Phe 105 Ile His Asp Cys Ile Phe Phe Xaa Asn Trp Ser Leu Met Asn Lys Asn 120 Phe Asn Ile Ile Tyr Xaa Phe Phe Ile Ser Leu Arg Xaa Asn Thr Leu 135 Ile Leu Gln Lys Tyr Phe Pro Phe Ser Leu Leu Gly Trp His Cys 150 155 Lys Trp Tyr Gly His Arg Thr Gly Tyr Lys Glu Cys Pro Phe Phe Ile 165 170 Lys Asp Asn Gln Lys Leu Gln Gln Phe Arg Val Ala His Glu Asp Phe 185 190 Met Tyr Asp Ile Ile Arg Asp Asn Lys Gln His Glu Lys Asn Val Arg 200 Ile Gln Gln Leu Lys Gln Leu Leu Glu Asp Ser Thr Ser Gly Glu Asp 215 220 Arg Ser Ser Ser Ser Ser Glu Gly Lys Glu Lys His Lys Lys 230 235 Lys Lys Lys Glu Lys His Lys Lys Arg Lys Lys Glu Lys Lys Lys 250 Lys Lys Arg Lys His Lys Ser Ser Lys Ser Asn Glu Gly Ser Asp Ser Glu 273

<210> 1076
<211> 815
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (815)
<223> X = any amino acid or stop code

<400> 1076
Glu Ile Ala Gly Ala Ala Ala Glu Asn Met Leu Gly Ser Leu Leu Cys

1.0 Leu Pro Gly Ser Gly Ser Val Leu Leu Asp Pro Cys Thr Gly Ser Thr 25 Ile Ser Glu Thr Thr Ser Glu Ala Trp Ser Val Glu Val Leu Pro Ser Asp Ser Glu Ala Pro Asp Leu Lys Gln Glu Glu Arg Leu Gln Glu Leu 55 Glu Ser Cys Ser Gly Leu Gly Ser Thr Ser Asp Asp Thr Asp Val Arg 70 Glu Val Ser Ser Arg Pro Ser Thr Pro Gly Leu Ser Val Val Ser Gly 85 90 Ile Ser Ala Thr Ser Glu Asp Ile Pro Asn Lys Ile Glu Asp Leu Arg 100 105 Ser Glu Cys Ser Ser Asp Phe Gly Gly Lys Asp Ser Val Thr Ser Pro 120 125 Asp Met Asp Glu Ile Thr His Asp Phe Leu Tyr Ile Leu Gln Pro Lys 135 140 Gln His Phe Gln His Ile Glu Ala Glu Ala Asp Met Arg Ile Gln Leu 150 155 Ser Ser Ser Ala His Gln Leu Thr Ser Pro Pro Ser Gln Ser Glu Ser 170 Leu Leu Ala Met Phe Asp Pro Leu Ser Ser His Glu Gly Ala Ser Ala 185 Val Val Arg Pro Lys Val His Tyr Ala Arg Pro Ser His Pro Pro 200 Asp Pro Pro Ile Leu Glu Gly Ala Val Gly Gly Asn Glu Ala Arg Leu 215 Pro Asn Phe Gly Ser Pro Met Phe Xaa Leu Pro Ala Glu Met Glu Ala 230 235 Phe Lys Gln Arg His Ser Tyr Thr Pro Glu Arg Leu Val Arg Ser Arg 245 250 Ser Ser Asp Ile Val Ser Ser Val Arg Arg Pro Met Ser Asp Pro Ser 265 Trp Asn Arg Arg Pro Gly Asn Glu Glu Arg Glu Leu Pro Pro Ala Ala 280 Ala Ile Gly Ala Thr Ser Leu Val Ala Ala Pro His Ser Ser Ser Ser 295 Ser Pro Ser Lys Asp Ser Ser Arg Gly Glu Thr Glu Glu Arg Lys Asp 310 315 Ser Asp Asp Glu Lys Ser Asp Arg Asn Arg Pro Trp Trp Arg Lys Arg 325 330 Phe Val Ser Ala Met Pro Lys Ala Pro Ile Pro Phe Arg Lys Lys Glu 345 Lys Gln Glu Lys Asp Lys Asp Asp Leu Gly Pro Asp Arg Phe Ser Thr 360 Leu Thr Asp Asp Pro Ser Pro Arg Leu Ser Ala Gln Ala Gln Val Ala 375 380 Glu Asp Ile Leu Asp Lys Tyr Arg Asn Ala Ile Lys Arg Thr Ser Pro 390 395 Ser Asp Gly Ala Met Ala Asn Tyr Glu Ser Thr Glu Val Met Gly Asp 405 410 Gly Glu Ser Ala His Asp Ser Pro Arg Asp Glu Ala Leu Gln Asn Ile 425 Ser Ala Asp Asp Leu Pro Asp Ser Ala Ser Gln Ala Ala His Pro Gln 440 Asp Ser Ala Phe Ser Tyr Arg Asp Ala Lys Lys Lys Leu Arg Leu Ala 455 460 Leu Cys Ser Ala Asp Ser Val Ala Phe Pro Val Leu Thr His Ser Thr 470 475 Arg Asn Gly Leu Pro Asp His Thr Asp Pro Glu Asp Asn Glu Ile Val 490 Cys Phe Leu Lys Val Gln Ile Ala Glu Ala Ile Asn Leu Gln Asp Lys 505 Asn Leu Met Ala Gln Leu Gln Glu Thr Met Arg Cys Val Cys Arg Phe

520 Asp Asn Arg Thr Cys Arg Lys Leu Leu Ala Ser Ile Ala Glu Asp Tyr 535 Arg Lys Arg Ala Pro Tyr Ile Ala Tyr Leu Thr Arg Cys Arg Gln Gly 550 555 Leu Gln Thr Thr Gln Ala His Leu Glu Arg Leu Leu Gln Arg Val Leu 565 570 Arg Asp Lys Glu Val Ala Asn Arg Tyr Phe Thr Thr Val Cys Val Arg 580 585 Leu Leu Glu Ser Lys Glu Lys Lys Ile Arg Glu Phe Ile Gln Asp 600 Phe Gln Lys Leu Thr Ala Ala Asp Asp Lys Thr Ala Gln Val Glu Asp 615 Phe Leu Gln Phe Leu Tyr Gly Ala Met Ala Gln Asp Val Ile Trp Gln 630 635 Asn Ala Ser Glu Glu Gln Leu Gln Asp Ala Gln Leu Ala Ile Glu Arg 650 Ser Val Met Asn Arg Ile Phe Lys Leu Ala Phe Tyr Pro Asn Gln Asp 665 Gly Asp Ile Leu Arg Asp Gln Val Leu His Glu His Ile Gln Arg Leu 680 685 Ser Lys Val Val Thr Ala Asn His Arg Ala Leu Gln Ile Pro Glu Val 690 695 Tyr Leu Arg Glu Ala Pro Trp Pro Ser Ala Gln Ser Glu Ile Arg Thr 705 710 715 720 Ile Ser Ala Tyr Lys Thr Pro Arg Asp Lys Val Gln Cys Ile Leu Arg 725 730 735 Met Cys Ser Thr Ile Met Asn Leu Leu Ser Leu Ala Asn Glu Asp Ser 740 745 Val Pro Gly Ala Asp Asp Phe Val Pro Val Leu Val Phe Val Leu Ile 755 760 Lys Ala Asn Pro Pro Cys Leu Leu Ser Thr Val Gln Tyr Ile Ser Ser 770 775 Phe Tyr Ala Ser Cys Leu Ser Gly Glu Glu Ser Tyr Trp Trp Met Gln 790 795 Phe Thr Ala Ala Val Glu Phe Ile Lys Thr Ile Asp Asp Arg Lys 805

<210> 1077 <211> 256 <212>Amino acid <213> Homo sapiens

<400> 1077

Trp Pro Met Ser Leu Ala Arg Gly His Gly Asp Thr Ala Ala Ser Thr 5 10 Ala Ala Pro Leu Ser Glu Glu Gly Glu Val Thr Ser Gly Leu Gln Ala 20 25 Leu Ala Val Glu Asp Thr Gly Gly Pro Ser Ala Ser Ala Gly Lys Ala 40 Glu Asp Glu Gly Glu Gly Gly Arg Glu Glu Thr Glu Arg Glu Gly Ser 55 Gly Gly Glu Glu Ala Gln Gly Glu Val Pro Ser Ala Gly Gly Glu Glu 75 · 80 70 Pro Ala Glu Glu Asp Ser Glu Asp Trp Cys Val Pro Cys Ser Asp Glu 85 90 Glu Val Glu Leu Pro Ala Asp Gly Gln Pro Trp Met Pro Pro Pro Ser 105 Glu Ile Gln Arg Leu Tyr Glu Leu Leu Ala Ala His Gly Thr Leu Glu

115 120 125 Leu Gln Ala Glu Ile Leu Pro Arg Arg Pro Pro Thr Pro Glu Ala Gln 135 140 Ser Glu Glu Glu Arg Ser Asp Glu Glu Pro Glu Ala Lys Glu Glu Glu 150 155 Glu Glu Lys Pro His Met Pro Thr Glu Phe Asp Phe Asp Asp Glu Pro 165 170 175 Val Thr Pro Lys Asp Ser Leu Ile Asp Arg Arg Thr Pro Gly Ser 180 185 190 Ser Ala Arg Ser Gln Lys Arg Glu Ala Arg Leu Asp Lys Val Leu Ser 200 Asp Met Lys Arg His Lys Lys Leu Glu Glu Gln Ile Leu Arg Thr Gly 215 220 Arg Asp Leu Phe Ser Leu Asp Ser Glu Asp Pro Ser Pro Ala Ser Pro 230 235 Pro Leu Arg Ser Ser Gly Ser Ser Leu Phe Pro Arg Gln Arg Lys Tyr 250

<210> 1078 <211> 590 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(590) <223> X = any amino acid or stop code

<400> 1078 Leu Gly Arg Gly Thr Phe Gly Gln Val Val Xaa Cys Trp Lys Arg Gly Thr Asn Glu Ile Val Ala Ile Lys Ile Leu Lys Asn His Pro Ser Tyr 20 Ala Arg Gln Gly Gln Ile Glu Val Ser Ile Leu Ala Arg Leu Ser Thr 3.5 40 Glu Ser Ala Asp Asp Tyr Asn Phe Val Arg Ala Tyr Glu Cys Phe Gln 55 60 His Lys Asn His Thr Cys Leu Val Phe Glu Met Leu Glu Gln Asn Leu 70 75 Tyr Asp Phe Leu Lys Gln Asn Lys Phe Ser Pro Leu Pro Leu Lys Tyr 90 Ile Arg Pro Val Leu Gln Gln Val Ala Thr Ala Leu Met Lys Leu Lys 105 Ser Leu Gly Leu Ile His Ala Asp Leu Lys Pro Glu Asn Ile Met Leu 115 120 125 Val Asp Pro Ser Arg Gln Pro Tyr Arg Val Lys Val Ile Asp Phe Gly 135 140 Ser Ala Ser His Val Ser Lys Ala Val Cys Ser Thr Tyr Leu Gln Ser 150 155 Arg Tyr Tyr Arg Ala Pro Glu Ile Ile Leu Gly Leu Pro Phe Cys Glu 165 170 Ala Ile Asp Met Trp Ser Leu Gly Cys Val Ile Ala Glu Leu Phe Leu 180 185 Gly Trp Pro Leu Tyr Pro Gly Ala Ser Glu Tyr Asp Gln Ile Arg Tyr 200 205 Ile Ser Gln Thr Gln Gly Leu Pro Ala Glu Tyr Leu Leu Ser Ala Gly 215 220

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Thr Lys Thr Thr Arg Phe Phe Asn Arg Asp Thr Asp Ser Pro Tyr Pro
                 230
                                   235
Leu Trp Arg Leu Lys Thr Pro Asp Asp His Glu Ala Glu Thr Gly Ile
                     250
Lys Ser Lys Glu Ala Arg Lys Tyr Ile Phe Asn Cys Leu Asp Asp Met
                           265
Ala Gln Val Asn Met Thr Thr Asp Leu Glu Gly Ser Asp Met Leu Val
                       280
Glu Lys Ala Val Arg Arg Glu Phe Ile Asp Leu Leu Lys Lys Met Leu
                   295
Ser Ile Asp Ser Val Lys Arg Phe Ser Pro Val Gly Ser Leu Asn His
                310
                                  315
Pro Phe Val Thr Met Ser Leu Phe Leu Asp Phe Pro His Ser Thr His
            325
                              330
Val Lys Ser Cys Phe Gln Asn Met Glu Ile Cys Lys Arg Arg Val Asn
                          345
Met Tyr Asp Thr Val Asn Gln Ser Lys Thr Pro Phe Ile Thr His Val
     355 360 365
Ala Pro Ser Thr Ser Thr Asn Leu Thr Met Thr Phe Asn Asn Gln Leu
  370 375
                             380
Thr Thr Val His Asn Gln Pro Ser Ala Ala Ser Met Ala Ala Val Ala
385 390
                                  395
Gln Arg Ser Met Pro Leu Gln Thr Gly Thr Ala Gln Ile Cys Ala Arg
     405
                              410
Pro Asp Pro Phe Gln Gln Ala Leu Ile Val Cys Pro Pro Gly Phe Gln
         420 425 430
Gly Leu Gln Ala Ser Pro Ser Lys His Ala Gly Tyr Ser Val Arg Met
                                445
                       440
Glu Asn Ala Val Pro Ile Val Thr Gln Ala Pro Gly Ala Gln Pro Leu
                   455
                                      460
Gln Ile Gln Pro Gly Leu Leu Ala Gln Gln Ala Trp Pro Ser Gly Thr
                470
                                  475
Gln Gln Ile Leu Pro Pro Ala Trp Gln Gln Leu Thr Gly Val Ala
                               490
Thr His Thr Ser Val Gln His Ala Ala Val Ile Pro Glu Thr Met Ala
          500<sup>--</sup>
                           505
Gly Thr Gln Gln Leu Ala Asp Trp Arg Asn Thr His Ala His Gly Ser
                       520
His Tyr Asn Pro Ile Met Gln Gln Pro Ala Leu Leu Thr Gly His Val
                    535
                                      540
Thr Leu Pro Ala Ala Gln Pro Leu Asn Val Gly Val Ala His Val Met
                 550
                                  555
Arg Gln Gln Pro Thr Ser Thr Thr Ser Ser Arg Lys Ser Lys Gln His
             565
                               570
Leu Tyr Cys Gly Arg Ala Arg Val Ser Lys Ile Ala Ser Arg
                            585
                                             590
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<210> 1079
<211> 904
<212>Amino acid
<213> Homo sapiens
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<220>
<221> misc_feature
<222> (1)...(904)
<223> X = any amino acid or stop code

<400> 1079 Glu Phe Ala Ile Cys Arg Tyr Pro Leu Gly Met Ser Gly Gly Gln Ile

10 Pro Asp Glu Asp Ile Thr Ala Ser Ser Gln Trp Ser Glu Ser Thr Ala 25 Ala Lys Tyr Gly Arg Leu Asp Ser Glu Glu Gly Asp Gly Ala Trp Cys 40 Pro Glu Ile Pro Val Glu Pro Asp Asp Leu Lys Glu Phe Leu Gln Ile 55 Asp Leu His Thr Leu His Phe Ile Thr Leu Val Gly Thr Gln Gly Arg 70 His Ala Gly Gly His Gly Ile Glu Phe Ala Pro Met Tyr Lys Ile Asn Tyr Ser Arg Asp Gly Thr Arg Trp Ile Ser Trp Arg Asn Arg His Gly 105 Lys Gln Val Leu Asp Gly Asn Ser Asn Pro Tyr Asp Ile Phe Leu Lys 115 . 120 125 Asp Leu Glu Pro Pro Ile Val Ala Arg Phe Val Arg Phe Ile Pro Val 135 140 Thr Asp His Ser Met Asn Val Cys Met Arg Val Glu Leu Tyr Gly Cys 150 155 Val Trp Leu Asp Gly Leu Val Ser Tyr Asn Ala Pro Ala Gly Gln Gln 165 170 Phe Val Leu Pro Gly Gly Ser Ile Ile Tyr Leu Asn Asp Ser Val Tyr 185 Asp Gly Ala Val Gly Tyr Ser Met Thr Glu Gly Leu Gly Gln Leu Thr 200 Asp Gly Val Ser Gly Leu Asp Asp Phe Thr Gln Thr His Glu Tyr His 215 220 Val Trp Pro Gly Tyr Asp Tyr Val Gly Trp Arg Asn Glu Ser Ala Thr 230 235 Asn Gly Tyr Ile Glu Ile Met Phe Glu Phe Asp Arg Ile Arg Asn Phe 250 245 Thr Thr Met Lys Val His Cys Asn Asn Met Phe Ala Lys Gly Val Lys 265 Ile Phe Lys Glu Val Gln Cys Tyr Phe Arg Ser Glu Ala Ser Glu Trp 280 Glu Pro Asn Ala Ile Ser Phe Pro Leu Val Leu Asp Asp Val Asn Pro 295 Ser Ala Arg Phe Val Thr Val Pro Leu His His Arg Met Ala Ser Ala 310 315 Ile Lys Cys Gln Tyr His Phe Ala Asp Thr Trp Met Met Phe Ser Glu 325 330. Ile Thr Phe Gln Ser Asp Ala Ala Met Tyr Asn Asn Ser Glu Ala Leu 345 Pro Thr Ser Pro Met Ala Pro Thr Thr Tyr Asp Pro Met Leu Lys Val 360 Asp Asp Ser Asn Thr Arg Ile Leu Ile Gly Cys Leu Val Ala Ile Ile 375 380 Phe Ile Leu Leu Ala Ile Ile Val Ile Ile Leu Trp Arg Gln Phe Trp 390 395 Gln Lys Met Leu Glu Lys Ala Ser Arg Arg Met Leu Asp Asp Glu Met 405 410 Thr Val Ser Leu Ser Leu Pro Ser Asp Ser Ser Met Phe Asn Asn Asn 425 Arg Ser Ser Ser Pro Ser Glu Gln Gly Ser Asn Ser Thr Tyr Asp Arg 440 Ile Phe Pro Leu Arg Pro Asp Tyr Gln Glu Pro Ser Arg Leu Ile Arg 455 460 Lys Leu Pro Glu Phe Ala Pro Gly Glu Glu Glu Ser Gly Cys Ser Gly 470 475 Val Val Lys Pro Val Gln Pro Ser Gly Pro Glu Gly Val Pro His Tyr 490 Ala Glu Ala Asp Ile Val Asn Leu Gln Gly Val Thr Gly Gly Asn Thr Tyr Ser Val Pro Ala Val Thr Met Asp Leu Leu Ser Gly Lys Arg Cys

520 Gly Cys Gly Arg Glu Phe Pro Pro Gly Lys Leu Leu Thr Phe Lys Glu 535 Lys Leu Gly Glu Gly Gln Phe Gly Glu Val His Leu Cys Glu Val Glu 550 555 Gly Met Glu Lys Phe Lys Asp Lys Asp Phe Ala Leu Asp Val Ser Ala 570 565 Asn Gln Pro Val Leu Val Ala Val Lys Met Leu Arg Ala Asp Ala Asn 580 585 Lys Asn Ala Arg Asn Asp Phe Leu Lys Glu Ile Lys Ile Met Ser Arg 600 Leu Lys Asp Pro Asn Ile Ile His Leu Leu Ser Val Cys Ile Thr Asp 610 615 620 Asp Pro Leu Cys Met Ile Thr Glu Tyr Met Glu Asn Gly Asp Leu Asn 630 635 Gln Phe Leu Ser Arg His Glu Pro Pro Asn Ser Ser Ser Ser Asp Val 645 650 Arg Thr Val Ser Tyr Thr Asn Leu Lys Phe Met Ala Thr Gln Ile Ala 665 Ser Gly Met Lys Tyr Leu Ser Ser Leu Asn Phe Val His Arg Asp Leu 680 Ala Thr Arg Asn Cys Leu Val Gly Lys Asn Tyr Thr Ile Lys Ile Ala 695 Asp Phe Gly Met Ser Arg Asn Leu Tyr Ser Gly Asp Tyr Tyr Arg Ile 710 715 720 Gln Gly Arg Ala Val Leu Pro Ile Arg Trp Met Ser Trp Glu Ser Ile 730 735 Leu Leu Gly Lys Phe Thr Thr Ala Ser Asp Val Trp Ala Phe Gly Val 740 745 Thr Leu Trp Glu Thr Phe Thr Phe Cys Gln Arg Lys Gly Pro Tyr Ser 755 760 765 Gln Leu Ser Asp Glu Thr Gly Tyr Xaa Arg Asn Thr Gly Glu Phe Phe 775 780 Pro Arg Pro Lys Gly Gly Gln Thr Tyr Leu Pro Ser Thr Ser Pro Phe 790 795 Val Pro Asp Ser Cys Val Ile Lys Leu Met Leu Ser Cys Trp Arg Arg 805 810 815 Asp Thr Lys Asn Arg Pro Ser Phe Gln Glu Ile His Leu Leu Leu 825 Gln Gln Gly Asp Glu Arg Cys Cys Gln Cys Leu Ala Met Phe Leu Arg 840 . 845 Leu Arg Ser Ser Leu Gln Asp Leu Pro Leu Thr His Ala Tyr Ala Thr 855 Pro Ser Gly His Leu Met Lys Leu Arg Asp Arg Gly Leu Phe Ala Leu 870 875 Pro Ser Phe Pro Gly His Pro His Ser Leu Pro Leu Thr His Ile Tyr 885 890 Phe Phe Phe Thr Leu Lys Asn 900

<210> 1080 <211> 304 <212>Amino acid <213> Homo sapiens

<400> 1080

Cys Ser Ala Ser Pro Leu Arg Pro Gly Leu Leu Ala Pro Asp Leu Leu 1 5 10 15
Tyr Leu Pro Gly Ala Gly Gln Pro Arg Arg Pro Glu Ala Glu Pro Gly

20 25 30 Gln Lys Pro Val Val Pro Thr Leu Tyr Val Thr Glu Ala Glu Ala His 40 Ser Pro Ala Leu Pro Gly Leu Ser Gly Pro Gln Pro Lys Trp Val Glu Val Glu Glu Thr Ile Glu Val Arg Val Lys Lys Met Gly Pro Gln Gly 75 Val Ser Pro Thr Thr Glu Val Pro Arg Ser Ser Ser Gly His Leu Phe 90 Thr Leu Pro Gly Ala Thr Pro Gly Gly Asp Pro Asn Ser Asn Asn Ser 100 105 Asn Asn Lys Leu Leu Ala Gln Glu Ala Trp Ala Gln Gly Thr Ala Met 120 125 Val Gly Val Arg Glu Pro Leu Val Phe Arg Val Asp Ala Arg Gly Ser 135 140 Val Asp Trp Ala Ala Ser Gly Met Gly Ser Leu Glu Glu Gly Thr 150 155 Met Glu Glu Ala Gly Glu Glu Gly Glu Asp Gly Asp Ala Phe Val 170 Thr Glu Glu Ser Gln Asp Thr His Ser Leu Gly Asp Arg Asp Pro Lys 180 185 Ile Leu Thr His Asn Gly Arg Met Leu Thr Leu Ala Asp Leu Glu Asp 200 Tyr Val Pro Gly Glu Gly Glu Thr Phe His Cys Gly Gly Pro Gly Pro 215 220 Gly Ala Pro Asp Asp Pro Pro Cys Glu Val Ser Val Ile Gln Arg Glu 230 235 Ile Gly Glu Pro Thr Val Gly Ser Leu Cys Cys Ser Ala Trp Gly Met 245 250 His Trp Val Pro Glu Ala Leu Ser Ala Ser Leu Gly Leu Ser Pro Met 265 Gly Arg His His Arg Asp Pro Arg Ser Val Ala Leu Arg Ala Pro Pro 280 285 Ser Ser Cys Gly Arg Pro Arg Leu Gly Leu Trp Ala Val Leu Pro Gly 295 300

<210> 1081 <211> 139 <212>Amino acid <213> Homo sapiens

<400> 1081

Pro Ala Gly Ser Ser Leu Thr Ile Trp Thr Gln Gln Ser Gln Gly Gly

115 120 125 Pro Gly Thr Ala Gly Glu Leu Ala Ala Pro Ser 130 135 139

<210> 1082
<211> 1105
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1105)
<223> X = any amino acid or stop code

<400> 1082

Glu Lys Asn Ala Leu Glu Pro Thr Val Tyr Phe Gly Met Gly Val Xaa 10 Ala Pro Gln Val Pro Arg Phe Gln Gln Arg Ile Thr Gly Tyr Gln Tyr 25 Tyr Leu Gln Leu Arg Lys Asp Ile Trp Glu Glu Gly Ile Pro Cys Thr Leu Glu Gln Pro Ile His Leu Ala Gly Leu Ala Val Gln Ala Ile Phe 55 Gly Asp Phe Asp Gln Tyr Glu Ser Gln Asp Phe Leu Gln Lys Phe Ala Leu Phe Pro Val Gly Trp Leu Gln Asp Glu Lys Val Leu Glu Glu Ala Thr Gln Lys Val Ala Leu Leu His Gln Lys Tyr Arg Gly Leu Thr Ala 105 110 Pro Asp Ala Glu Met Leu Tyr Met Gln Glu Val Glu Arg Met Asp Gly 115 120 Tyr Gly Glu Glu Ser Tyr Pro Ala Lys Asp Ser Gln Gly Ser Asp Ile 135 140 Ser Ile Gly Ala Cys Leu Glu Gly Ile Phe Val Lys His Lys Asn Gly 150 155 Arg His Pro Val Val Phe Arg Trp His Asp Ile Ala Asn Met Ser His 170 175 Asn Lys Ser Phe Phe Ala Leu Glu Leu Ala Asn Lys Glu Glu Thr Ile 185 190 Gln Phe Gln Thr Glu Asp Met Glu Thr Ala Lys Tyr Ile Trp Arg Leu 200 205 Cys Val Ala Arg His Lys Phe Tyr Arg Leu Asn Gln Cys Asn Leu Gln 215 220 Thr Gln Thr Val Thr Val Asn Pro Ile Arg Arg Arg Ser Ser Ser Arg 230 235 Met Ser Leu Pro Lys Pro Gln Pro Tyr Val Met Pro Pro Pro Pro Gln 250 Leu His Tyr Asn Gly His Tyr Thr Glu Pro Tyr Ala Ser Ser Gln Asp Asn Leu Phe Val Pro Asn Gln Glu Gly Tyr Tyr Gly Gln Phe Gln Thr Ser Leu Asn Arg Ala Gln Ile Asp Phe Asn Gly Arg Ile Arg Asn Ala 295 300 Ser Val Tyr Ser Ala His Ser Thr Asn Ser Leu Asn Asn Pro Gln Pro 310 315 Tyr Leu Gln Pro Ser Pro Met Ser Ser Asn Pro Ser Ile Thr Gly Ser 330 Asp Val Met Arg Pro Asp Tyr Leu Pro Ser His Arg His Ser Ala Val 340 345

Ile Pro Pro Ser Tyr Arg Pro Thr Pro Asp Tyr Glu Thr Val Met Lys Gln Leu Asn Arg Gly Leu Val His Ala Glu Arg Gln Ser His Ser Leu Arg Asn Leu Asn Ile Gly Ser Ser Tyr Ala Tyr Ser Arg Pro Ala Ala Leu Val Tyr Ser Gln Pro Glu Ile Arg Glu His Ala Gln Leu Pro Ser Pro Ala Ala Ala His Cys Pro Phe Ser Leu Ser Tyr Ser Phe His Ser Pro Ser Pro Tyr Pro Tyr Pro Ala Glu Arg Arg Pro Val Val Gly Ala Val Ser Val Pro Glu Leu Thr Asn Ala Gln Leu Gln Ala Gln Asp Tyr Pro Ser Pro Asn Ile Met Arg Thr Gln Val Tyr Arg Pro Pro Pro Tyr Pro Pro Pro Arg Pro Ala Asn Ser Thr Pro Asp Leu Ser Arg His Leu Tyr Ile Ser Ser Ser Asn Pro Asp Leu Ile Thr Arg Arg Val His His Ser Val Gln Thr Phe Gln Glu Asp Ser Leu Pro Val Ala His Ser Leu Gln Glu Val Ser Glu Pro Leu Thr Ala Ala Arg His Ala Gln Leu His Lys Arg Asn Ser Ile Glu Val Ala Gly Leu Ser His Gly Leu Glu Gly Leu Arg Leu Lys Glu Arg Thr Leu Ser Ala Ser Ala Ala Glu Val Ala Pro Arg Ala Val Ser Val Gly Ser Gln Pro Ser Val Phe Thr Glu Arg Thr Gln Arg Glu Gly Pro Glu Glu Ala Glu Gly Leu Arg Tyr Gly His Lys Lys Ser Leu Ser Asp Ala Thr Met Leu Ile His Ser Ser Glu Glu Glu Glu Asp Glu Asp Phe Glu Glu Glu Ser Gly Ala Arg Ala Pro Pro Ala Arg Ala Arg Glu Pro Arg Pro Gly Leu Ala Gln Asp Pro Pro Gly Cys Pro Arg Val Leu Leu Ala Gly Pro Leu His Ile Leu Glu Pro Lys Ala His Val Pro Asp Ala Glu Lys Arg Met Met Asp Ser Ser Pro Val Arg Thr Thr Ala Glu Ala Gln Arg Pro Trp Arg Asp Gly Leu Leu Met Pro Ser Met Ser Glu Ser Asp Leu Thr Thr Ser Gly Arg Tyr Arg Ala Arg Arg Asp Ser Leu Lys Lys Arg Pro Val Ser Asp Leu Leu Ser Gly Lys Lys Asn Ile Val Glu Gly Leu Pro Pro Leu Gly Gly Met Lys Lys Thr Arg Val Asp Ala Lys Lys Ile Gly Pro Leu Lys Leu Ala Ala Leu Asn Gly Leu Ser Leu Ser Arg Val Pro Leu Pro Asp Glu Gly Lys Glu Val Ala Thr Arg Ala Thr Asn Asp Glu Arg Cys Lys Ile Leu Glu Gln Arg Leu Glu Gln Gly Met Val Phe Thr Glu Tyr Glu Arg Ile Leu Lys Lys Arg Leu Val Asp Gly Glu Cys Ser Thr Ala Arg Leu Pro Glu Asn Ala Glu Arg Asn Arg Phe Gln Asp Val Leu Pro Tyr Asp Asp Val Arg Val Glu Leu Val Pro Thr Lys Glu Asn Asn Thr Gly Tyr Ile Asn

Ala Ser His Ile Lys Val Ser Val Ser Gly Ile Glu Trp Asp Tyr Ile 870 875 Ala Thr Gln Gly Pro Leu Gln Asn Thr Cys Gln Asp Phe Trp Gln Met 885 890 Val Trp Glu Gln Gly Ile Ala Ile Ile Ala Met Val Thr Ala Glu Glu 905 Glu Gly Gly Arg Glu Lys Ser Phe Arg Tyr Trp Pro Arg Leu Gly Ser 920 925 Arg His Asn Thr Val Thr Tyr Gly Arg Phe Lys Ile Thr Thr Arg Phe 935 940 Arg Thr Asp Ser Gly Cys Tyr Ala Thr Thr Gly Leu Lys Met Lys His 950 955 Leu Leu Thr Gly Gln Glu Arg Thr Val Trp His Leu Gln Tyr Thr Asp 965 970 Trp Pro Glu His Gly Cys Pro Glu Asp Leu Lys Gly Phe Leu Ser Tyr 985 Leu Glu Glu Ile Gln Ser Val Arg Arg His Thr Asn Ser Thr Ser Asp 1000 1005 Pro Gln Ser Pro Asn Pro Pro Leu Leu Val His Cys Ser Ala Gly Val 1015 1020 Gly Arg Thr Gly Val Val Ile Leu Ser Glu Ile Met Ile Ala Cys Leu 1030 1035 . Glu His Asn Glu Val Leu Asp Ile Pro Arg Val Leu Asp Met Leu Arg 1045 1050 1055 Gln Gln Arg Met Met Leu Val Gln Thr Leu Cys Gln Tyr Thr Phe Val 1060 1065 1070 Tyr Arg Val Leu Ile Gln Val Pro Glu Lys Ala Pro Arg Leu Ile Leu 1075 1080 1085 Ser Ser Pro Gln Phe Pro Tyr Gly Ala Gln Ser Cys Glu Ala Phe Thr 1095 1100 Ala 1105

<210> 1083
<211> 99
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(99)
<223> X = any amino acid or stop code

<400> 1083 Arg Lys Lys Gln Lys Leu Ala Glu Glu Xaa Val Glu Leu Ser Lys Leu 5 10 Ala Asp Leu Lys Asp Ala Glu Ala Val Gln Lys Phe Phe Leu Glu Glu 20 25 Ile Xaa Leu Gly Glu Glu Ile Leu Ala Lys Gly Val Asp His Leu Thr 45 Asn Pro Ser Ala Val Cys Gly Gln Pro Gln Trp Leu Leu Gln Val Leu 55 Gln Gln Thr Leu Pro Leu Pro Val Ile Gln Met Leu Leu Thr Lys Pro 70 . 75 Leu Pro Val Asn Gln Arg Leu Val Ser Ala Gly Ser Leu Ala Lys Asp Asp Val Glu 99

<210> 1084
<211> 206
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(206)
<223> X = any amino acid or stop code

Ser Phe Cys Leu His Glu Phe Gly Trp Leu Gly Ser Ser Pro Gln Ser Asp His Pro Val Pro Ala Leu Leu Gly Leu Gly Ala Phe Val His His 20 25 Ser Leu Leu Gln Val His Ser Ser Pro Gly Ala Gly Pro Val Ser Phe 40 Leu Phe Leu Gly Glu Ser Cys Ser Pro Val Asp Glu Pro Arg Cys Val 55 Pro Ser Cys Ala Phe Gly Phe Leu Ser Cys Phe Pro Leu Leu Asn Ser 70 Ala Ala Leu Glu Arg Gly Leu Phe Phe Phe Val Val Phe Phe Phe Leu 90 Glu Ser Gly Ser Cys Gln Val Ala Arg Ala Gly Val Arg Asp Arg Asp 100 105 Arg Gly Ser Leu Gln Pro Pro Pro Pro Gly Leu Lys Gln Phe Cys Leu 120 125 Ser Leu Pro Ser Arg Trp Asp His Arg His Pro Pro Pro Leu Arg Val 135 140 Pro Xaa Phe Val Phe Val Phe Leu Val Glu Leu Gly Phe His His Val 150 Ala Gln Ala Gly Leu Lys Leu Leu Thr Leu Ser Asp Pro Pro Ala Pro 170 Ala Ser His Ser Ala Gly Ile Thr Gly Val Ser Gln Arg Asp Gln Pro 185 Val Leu Phe Leu Arg Trp Ala Ser Cys Ser Glu Leu Val Gly 205 206

<210> 1085 <211> 99 <212>Amino acid <213> Homo sapiens

<400> 1084

Cys Gln Gln Leu Val Arg Arg Gly Phe Thr Val Leu Ala Arg Met Val
85
90
95
Ser Ile Ser
99

<210> 1086 <211> 53 <212>Amino acid <213> Homo sapiens

<210> 1087 <211> 250 <212>Amino acid <213> Homo sapiens

<400> 1087 Leu Asn Pro Trp Lys Asn Ala Leu Gln Asp Phe Cys Leu Pro Phe Leu 10 Arg Ile Thr Ser Leu Leu Gln His His Leu Phe Gly Glu Asp Leu Pro 25 Ser Cys Gln Glu Glu Glu Phe Ser Val Leu Ala Ser Cys Leu Gly 40 Leu Leu Pro Thr Phe Tyr Gln Thr Glu His Pro Phe Ile Ser Ala Ser 55 60 Cys Leu Asp Trp Pro Val Pro Ala Phe Asp Ile Ile Thr His Trp Cys 70 Phe Glu Ile Lys Ser Phe Thr Glu Arg His Ala Glu Gln Gly Lys Ala 90 Leu Leu Ile Gln Glu Ser Lys Trp Lys Leu Pro His Leu Leu Gln Leu 105 Pro Glu Asn Tyr Asn Thr Ile Phe Gln Tyr Tyr His Arg Lys Thr Cys 120 Ser Val Cys Thr Lys Val Pro Lys Asp Pro Ala Val Cys Leu Val Cys 135 Gly Thr Phe Val Cys Leu Lys Gly Leu Cys Cys Lys Gln Gln Ser Tyr 150 155 Cys Glu Cys Val Leu His Ser Gln Asn Cys Gly Ala Gly Thr Gly Ile 165 170 175 Phe Leu Leu Ile Asn Ala Ser Val Ile Ile Ile Ile Arg Gly His Arg 185 Phe Cys Leu Trp Gly Ser Val Tyr Leu Asp Ala His Gly Glu Glu Asp 200 205 Arg Asp Leu Arg Arg Gly Lys Pro Leu Tyr Ile Cys Lys Glu Arg Tyr 215 220

<210> 1088 <211> 455 <212>Amino acid <213> Homo sapiens

<400> 1088

Lys Gly Gln Leu Val Asn Leu Leu Pro Pro Glu Asn Phe Pro Trp Cys 5 10 Gly Gly Ser Gln Gly Pro Arg Met Leu Arg Thr Cys Tyr Val Leu Cys 20 25 Ser Gln Ala Gly Pro Arg Ser Arg Gly Trp Gln Ser Leu Ser Phe Asp 40 Gly Gly Ala Phe His Leu Lys Gly Thr Gly Glu Leu Thr Arg Ala Leu 55 Leu Val Leu Arg Leu Cys Ala Trp Pro Pro Leu Val Thr His Gly Leu 75 Leu Leu Gln Ala Trp Ser Arg Leu Leu Gly Ser Arg Leu Ser Gly 90 Ala Phe Leu Arg Ala Ser Val Tyr Gly Gln Phe Val Ala Gly Glu Thr 105 Ala Glu Glu Val Lys Gly Cys Val Gln Gln Leu Arg Thr Leu Ser Leu 120 125 Arg Pro Leu Leu Ala Val Pro Thr Glu Glu Glu Pro Asp Ser Ala Ala 135 140 Lys Ser Gly Glu Ala Trp Tyr Glu Gly Asn Leu Gly Ala Met Leu Arg 150 155 Cys Val Asp Leu Ser Arg Gly Leu Leu Glu Pro Pro Ser Leu Ala Glu 165 170 Ala Ser Leu Met Gln Leu Lys Val Thr Ala Leu Thr Ser Thr Arg Leu 185 Cys Lys Glu Leu Ala Ser Trp Val Arg Arg Pro Gly Ala Ser Leu Glu 200 205 Leu Ser Pro Glu Arg Leu Ala Glu Ala Met Asp Ser Gly Gln Asn Leu 215 220 Gln Val Ser Cys Leu Asn Ala Glu Gln Asn Gln His Leu Arg Ala Ser 230 235 Leu Ser Arg Leu His Arg Val Ala Gln Tyr Ala Arg Ala Gln His Val 250 Arg Leu Leu Val Asp Ala Glu Tyr Thr Ser Leu Asn Pro Ala Leu Ser 265 Leu Leu Val Ala Ala Leu Ala Val Arg Trp Asn Ser Pro Gly Glu Gly 280 Gly Pro Trp Val Trp Asn Thr Tyr Gln Ala Cys Leu Lys Asp Thr Phe 295 Glu Arg Leu Gly Arg Asp Ala Glu Ala Ala His Arg Ala Gly Leu Ala 310 315 Phe Gly Val Lys Leu Val Arg Gly Ala Tyr Leu Asp Lys Glu Arg Ala 325 330 Val Ala Gln Leu His Gly Met Glu Asp Pro Pro Thr Gln Ala Asp Tyr 345 Glu Ala Thr Ser Gln Ser Tyr Ser Arg Cys Leu Glu Leu Met Leu Thr 360 His Val Ala Arg His Gly Pro Met Cys His Leu Met Val Ala Ser His 375

<210> 1089
<211> 243
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(243)
<223> X = any amino acid or stop code

<400> 1089 Val Val Glu Phe Gly Glu Met Ser Thr Ala Arg Ala Pro Glu Gly Leu 10 Arg Trp Phe Gln Leu Tyr Val His Pro Asp Leu Gln Leu Asn Lys Gln 20 25 Leu Ile Gln Arg Val Glu Ser Leu Gly Phe Lys Ala Leu Val Ile Thr 40 Leu Asp Thr Pro Val Cys Gly Asn Arg Arg His Asp Ile Arg Asn Gln 55 Leu Arg Arg Asn Leu Thr Leu Thr Asp Leu Gln Ser Pro Lys Lys Gly 75 Asn Ala Ile Pro Tyr Phe Gln Met Thr Pro Ile Ser Thr Ser Leu Cys 85 90 Trp Asn Asp Leu Ser Trp Phe Gln Ser Ile Thr Arg Leu Pro Ile Ile 105 Leu Lys Gly Ile Leu Thr Lys Glu Asp Ala Glu Leu Ala Val Lys His 115 120 Asn Val Gln Gly Ile Ile Val Ser Asn His Gly Gly Arg Gln Leu Asp 135 Glu Val Leu Ala Ser Ile Asp Ala Leu Thr Glu Val Gly Ala Ala Glu 150 155 Xaa Gly Asn Met Lys Tyr Tyr Leu Asp Ala Gly Val Arg Thr Gly Asn 165 170 Asp Val Gln Lys Ala Leu Ala Leu Gly Ala Lys Cys Ile Phe Leu Gly 180 185 190 Arg Pro Ile Leu Trp Gly Leu Ala Cys Lys Gly Glu His Gly Val Lys 200 Glu Val Leu Asn Ile Leu Thr Asn Glu Phe His Thr Ser Met Ala Leu 215 220 Thr Gly Cys Arg Ser Val Ala Glu Ile Asn Arg Asn Leu Val Gln Phe 235 Ser Arg Leu

<210> 1090 <211> 90 <212>Amino acid

243

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(90)

<223> X = any amino acid or stop code

<400> 1090

Phe Phe Leu Arg Trp Ser Phe Thr Leu Leu Pro Arg Leu Glu Cys Gln 10

Trp Leu Asn Leu Gly Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys Xaa 25

Ser Ser Cys Leu Arg Leu Leu Ser Ser Trp Gly Leu Gln Val Pro Thr 40

Ser Met Leu Gly Xaa Phe Phe Cys Ile Phe Ser Arg Glu Gly Ile Ser 55 60

Pro Cys Trp Pro Gly Trp Ser Gln Thr Pro Lys Val Ile His Leu Pro 70

Arg Pro Pro Arg Val Leu Arg Leu Gln Ala 85

<210> 1091

<211> 259

<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(259)

<223> X = any amino acid or stop code

<400> 1091

Leu Leu Cys Phe Val His Thr Ala Leu Gln Ser Phe Gln Gly Glu Leu 10 Tyr Glu Pro His Val Val Ile Ala Ile Val Val Phe Leu Val Lys Leu 20 25 Gly Ile Cys Lys Xaa Arg Ala Ser Trp Arg Lys Lys Val Thr Leu Val 35 40 Val Lys Xaa Ser Leu Lys Ile Cys Phe Thr Lys Tyr Gly Ser Cys Tyr 55 His Pro Gly Glu Lys Ser Ser Ser Trp Leu Phe Asn Xaa Arg Met Val 70 Asn Asp Cys Leu Ala Thr Ser Cys Ser Asn Arg Ser Phe Val Ile Gln 85 90 Gln Ile Pro Ser Ser Asn Leu Phe Met Val Val Val Asp Ser Ser Cys 100 105 110 Leu Cys Glu Ser Val Ala Pro Ile Thr Met Ala Pro Ile Glu Ile Arg 120 125 Tyr Ile Leu Leu Cys Ala Gly Pro Leu Thr Thr Thr Glu Thr Ser Lys 135 140

Gly Tyr Gln Trp Xaa Gly Asn Leu Gly Glu Lys Tyr Xaa Arg Arg Lys 150 155

Ile Thr Ser Phe Pro Leu Leu Glu Arg Glu Ser Ser Xaa Glu Ser Cys 170 His Cys Gln Ile Leu Thr Ser Glu Met Gln Ser Arg Lys Lys Gln Ser

180 185 190 Leu Glu Thr Cys Leu Asn Tyr Ser Gln His Asn Glu Ser Leu Lys Cys 200 195 205 Glu Arg Leu Lys Ala Gln Lys Ile Arg Arg Arg Pro Glu Ser Cys His 215 220 Gly Phe His Pro Glu Glu Asn Ala Arg Glu Cys Gly Gly Ala Pro Ser 230 235 Leu Gln Ala Gln Thr Val Leu Leu Leu Leu Pro Leu Leu Met Leu 245 250 Phe Ser Arg 259

<210> 1092 <211> 117 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(117) <223> X = any amino acid or stop code

Val Pro Ser Pro Thr His Asp Pro Lys Pro Ala Glu Ala Pro Met Pro Ala Xaa Pro Ala Pro Pro Gly Pro Ala Ser Pro Gly Gly Ala Leu Glu 20 Pro Pro Ala Ala Arg Ala Gly Gly Ser Pro Thr Ala Val Arg Ser 40 Ile Leu Thr Lys Glu Arg Arg Pro Glu Gly Gly Tyr Lys Ala Val Trp 55 60 Phe Gly Glu Asp Ile Gly Thr Glu Ala Asp Val Val Leu Asn Ala 70 75 Pro Thr Leu Asp Val Asp Gly Ala Ser Asp Ser Gly Ser Gly Asp Glu 90 Gly Glu Gly Ala Gly Arg Gly Gly Gly Pro Tyr Asp Ala Pro Gly Gly 105 Asp Asp Ser Tyr Ile 115 117

<210> 1093 <211> 763 <212>Amino acid <213> Homo sapiens

Leu Leu Phe Ser Ala Leu Ile Thr Arg Ile Phe Gly Val Lys Arg Ala Lys Asp Glu His Ser Lys Thr Asn Arg Met Thr Gly Arg Glu Phe Phe Ser Arg Phe Pro Glu Leu Tyr Pro Phe Leu Leu Lys Gln Leu Glu Thr Val Ala Asn Thr Val Asp Ser Asp Met Gly Glu Pro Asn Arg His Pro Ser Met Phe Leu Leu Leu Val Leu Glu Arg Leu Tyr Ala Ser Pro Met Asp Gly Thr Ser Ser Ala Leu Ser Met Gly Pro Phe Val Pro Phe Ile Met Arg Cys Gly His Ser Pro Val Tyr His Ser Arg Glu Met Ala Ala Arg Ala Leu Val Pro Phe Val Met Ile Asp His Ile Pro Asn Thr Ile Arg Thr Leu Leu Ser Thr Leu Pro Ser Cys Thr Asp Gln Cys Phe Arg Gln Asn His Ile His Gly Thr Leu Leu Gln Val Phe His Leu Val Gln Ala Tyr Ser Asp Ser Lys His Gly Thr Asn Ser Asp Phe Gln His Glu Leu Thr Asp Ile Thr Val Cys Thr Lys Ala Lys Leu Trp Leu Ala Lys Arg Gln Asn Pro Cys Leu Val Thr Arg Ala Val Tyr Ile Asp Ile Leu Phe Leu Leu Thr Cys Cys Leu Asn Arg Ser Ala Lys Asp Asn Gln Pro Val Leu Glu Ser Leu Gly Phe Trp Glu Glu Val Arg Gly Ile Ile Ser Gly Ser Glu Leu Ile Thr Gly Phe Pro Trp Ala Phe Lys Val Pro Gly Leu Pro Gln Tyr Leu Gln Ser Leu Thr Arg Leu Ala Ile Ala Ala Val Trp Ala Ala Ala Lys Ser Gly Glu Arg Glu Thr Asn Val Pro Ile Ser Phe Ser Gln Leu Leu Glu Ser Ala Phe Pro Glu Val Arg Ser Leu Thr Leu Glu Ala Leu Leu Glu Lys Phe Leu Ala Ala Ala Ser Gly Leu Gly Glu Lys Gly Val Pro Pro Leu Leu Cys Asn Met Gly Glu Lys Phe Leu Leu Leu Ala Met Lys Glu Asn His Pro Glu Cys Phe Cys Lys 405 410 Ile Leu Lys Ile Leu His Cys Met Asp Pro Gly Glu Trp Leu Pro Gln Thr Glu His Cys Val His Leu Thr Pro Lys Glu Phe Leu Ile Trp Thr Met Asp Ile Ala Ser Asn Glu Arg Ser Glu Ile Gln Ser Val Ala Leu Arg Leu Ala Ser Lys Val Ile Ser His His Met Gln Thr Cys Val Glu Asn Arg Glu Leu Ile Ala Ala Glu Leu Lys Gln Trp Val Gln Leu Val Ile Leu Ser Cys Glu Asp His Leu Pro Thr Glu Ser Arg Leu Ala Val Val Glu Val Leu Thr Ser Thr Thr Pro Leu Phe Leu Thr Asn Pro His Pro Ile Leu Glu Leu Gln Asp Thr Leu Ala Leu Trp Lys Cys Val Leu Thr Leu Leu Gln Ser Glu Glu Gln Ala Val Arg Asp Ala Ala Thr Glu Thr Val Thr Thr Ala Met Ser Gln Glu Asn Thr Cys Gln Ser Thr Glu

Phe Ala Phe Cys Gln Val Asp Ala Ser Ile Ala Leu Ala Leu Ala Leu 585 Ala Val Leu Cys Asp Leu Leu Gln Gln Trp Asp Gln Leu Ala Pro Gly 600 Leu Pro Ile Leu Leu Gly Trp Leu Leu Gly Glu Ser Asp Asp Leu Val 615 Ala Cys Val Glu Ser Met His Gln Val Glu Glu Asp Tyr Leu Phe Glu 630 635 Lys Ala Glu Val Asn Phe Trp Ala Glu Thr Leu Ile Phe Val Lys Tyr 650 645 Leu Cys Lys His Leu Phe Cys Leu Leu Ser Lys Ser Gly Trp Arg Pro 665 660 Pro Ser Pro Glu Met Leu Cys His Leu Gln Arg Met Val Ser Glu Gln 680 Cys His Leu Leu Ser Gln Phe Phe Arg Glu Leu Pro Pro Ala Ala Glu 695 700 Phe Val Lys Thr Val Glu Phe Thr Arg Leu Arg Ile Gln Glu Glu Arg 710 715 Thr Leu Ala Cys Leu Arg Leu Leu Ala Phe Leu Glu Gly Lys Glu Gly 725 730 Glu Asp Thr Leu Val Leu Ser Val Trp Asp Ser Tyr Ala Glu Ser Arg 745 Gln Leu Thr Leu Pro Arg Thr Glu Ala Ala Cys 760

<210> 1094 <211> 413 <212>Amino acid <213> Homo sapiens

<400> 1094 His Ala Phe Arg Pro Ile Ala Leu Gln Arg Gly Val Ser Phe Arg Gly 10 Cys Ser Asn Gln Tyr Ala Glu Ser Arg Arg Leu Gln Gly Glu Ser Gly 25 Ser Arg Ala Phe Ala His Leu Met Glu Ser Leu Leu Gln His Leu Asp Arg Phe Ser Glu Leu Leu Ala Val Ser Ser Thr Thr Tyr Val Ser Thr Trp Asp Pro Ala Thr Val Arg Arg Ala Leu Gln Trp Ala Arg Tyr Leu 70 Arg His Ile His Arg Arg Phe Gly Arg His Gly Pro Ile Arg Thr Ala 85 90 Leu Glu Arg Arg Leu His Asn Gln Trp Arg Gln Glu Gly Gly Phe Gly 105 Arg Gly Pro Val Pro Gly Leu Ala Asn Phe Gln Ala Leu Gly His Cys 120 Asp Val Leu Leu Ser Leu Arg Leu Leu Glu Asn Arg Ala Leu Gly Asp 135 140 Ala Ala Arg Tyr His Leu Val Gln Gln Leu Phe Pro Gly Pro Gly Val 150 155 Arg Asp Ala Asp Glu Glu Thr Leu Gln Glu Ser Leu Ala Arg Leu Ala 170 165 Arg Arg Arg Ser Ala Val His Met Leu Arg Phe Asn Gly Tyr Arg Glu 185 Asn Pro Asn Leu Gln Glu Asp Ser Leu Met Lys Thr Gln Ala Glu Leu 200 Leu Leu Glu Arg Leu Gln Glu Val Gly Lys Ala Glu Ala Glu Arg Pro

Ala Arg Phe Leu Ser Ser Leu Trp Glu Arg Leu Pro Gln Asn Asn Phe 230 235 Leu Lys Val Ile Ala Val Ala Leu Leu Gln Pro Pro Leu Ser Arg Arg 245 250 Pro Gln Glu Glu Leu Glu Pro Gly Ile His Lys Ser Pro Gly Glu Gly 260 265 270 Ser Gln Val Leu Val His Trp Leu Leu Gly Asn Ser Glu Val Phe Ala . 285 280 Ala Phe Cys Arg Ala Leu Pro Ala Gly Leu Leu Thr Leu Val Thr Ser 295 Arg His Pro Ala Leu Ser Pro Val Tyr Leu Gly Leu Leu Thr Asp Trp 310 315 Gly Gln Arg Leu His Tyr Asp Leu Gln Lys Gly Ile Trp Val Gly Thr 325 330 Glu Ser Gln Asp Val Pro Trp Glu Glu Leu His Asn Arg Phe Gln Ser 340 345 Leu Cys Gln Ala Pro Pro Pro Leu Lys Asp Lys Val Leu Thr Ala Leu 360 365 Glu Thr Cys Lys Ala Gln Asp Gly Asp Phe Glu Glu Pro Gly Leu Ser 375 380 Ile Trp Thr Asp Leu Leu Leu Ala Leu Arg Ser Gly Ala Phe Arg Lys 390 395 Arg Gln Val Leu Gly Leu Ser Ala Gly Leu Ser Ser Val 405

<210> 1095 <211> 344 <212>Amino acid <213> Homo sapiens <220>

<221> misc_feature <222> (1)...(344)

<223> X = any amino acid or stop code

<400> 1095 Ser His Leu Ile Gln His Gln Arg Ile His Thr Xaa Glu Xaa Ala His 10 Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser Gln Thr Ser Cys Leu Ile 20 25 Gln His His Lys Met His Arg Lys Glu Lys Ser Tyr Glu Cys Asn Glu 40 Tyr Glu Gly Ser Phe Ser His Ser Ser Asp Leu Ile Leu Gln Glu 55 Val Leu Thr Arg Gln Lys Ala Phe Asp Cys Asp Val Trp Glu Lys Asn 70 Ser Ser Gln Arg Ala His Leu Val Gln His Gln Ser Ile His Thr Lys 85 90 Glu Lys Pro His Glu Cys Asn Glu Asp Gly Lys Ile Phe Asn Gln Ile 105 Gln Ala Leu Ile Gln His Leu Arg Val His Thr Arg Glu Lys Tyr Val 120 125 Cys Thr Ala Cys Gly Lys Ala Phe Ser His Ser Ser Ala Ile Ala Gln 135 140 His Gln Ile Ile His Thr Arg Glu Lys Pro Ser Glu Cys Asp Glu Xaa 150 155 Arg Lys Gly Ile Ser Val Lys Leu Leu Ile Asp Ser Cys Arg Ile Tyr 170 Thr Ser Glu Lys Ser Tyr Lys Cys Ile Glu Cys Gly Lys Phe Phe Met

180 185 190 Leu Leu Val Phe Ser Tyr Leu Ser His Ile Trp Arg Ile His Met Gly 200 Ile Lys Phe His Cys Cys Asn Glu Cys Glu Lys Ala Ile Ser Gln Arq 215 Asn Tyr Leu Val Xaa Tyr Gln Ile His Ala Met Gln Lys Asp Tyr Lys 230 235 Cys Asn Glu Ala Cys Met Cys Val Arg Arg Phe Ser His Asn Pro Thr 245 250 Leu Ile Gln His Gln Arg Ile Tyr Thr Xaa Glu Asn Leu Phe Gly Cys 265 Ser Lys Cys Gly Arg Ser Phe Asn Arg Ser Leu Thr Ser Leu Cys His 280 Ile Arg Ile Ser Ile Arg Arg Gln Glu Phe Asp Val Thr Gln Met Glu 295 300 Lys Leu Asp Thr Thr Phe Gln Ala Ser Thr Gln His Arg Asn Asn Gly 315 310 Glu Lys Ile Val Asp Tyr Leu Phe Met Lys Leu Leu Ile His Ser Pro 325 330 Asn Leu Phe His Cys Thr Lys Ile 340

<210> 1096 <211> 76 <212>Amino acid <213> Homo sapiens

<210> 1097

<211> 1462 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(1462) <223> X = any amino acid or stop code

Ser Ser Gln Val Ser Leu Gly Phe Asp Gln Ile Val Asp Glu Ile Ser Gly Lys Ile Pro His Tyr Glu Ser Glu Ile Asp Glu Asn Thr Phe Phe 55 Val Pro Thr Ala Pro Lys Trp Asp Ser Thr Gly His Ser Leu Asn Glu 70 75 Ala His Gln Ile Ser Leu Asn Glu Phe Thr Ser Lys Ser Arg Glu Leu 85 90 Ser Trp His Gln Val Ser Lys Ala Pro Ala Ile Gly Phe Ser Pro Ser 100 105 Val Leu Pro Lys Pro Gln Asn Thr Asn Lys Glu Cys Ser Trp Gly Ser 120 Pro Ile Gly Lys His His Gly Ala Asp Asp Ser Arg Phe Ser Ile Leu 135 140 Ala Pro Ser Phe Thr Ser Leu Asp Lys Ile Asn Leu Glu Lys Glu Leu 150 155 Glu Asn Glu Asn His Asn Tyr His Ile Gly Phe Glu Ser Ser Ile Pro 170 165 Pro Thr Asn Ser Ser Phe Ser Ser Asp Phe Met Pro Lys Glu Glu Asn 185 180 Lys Arg Ser Gly His Val Asn Ile Val Glu Pro Ser Leu Met Leu Leu 195 200 Lys Gly Ser Leu Gln Pro Gly Met Trp Glu Ser Thr Trp Gln Lys Asn 215 220 Ile Glu Ser Ile Gly Cys Ser Ile Gln Leu Val Glu Val Pro Gln Ser 230 235 Ser Asn Thr Ser Leu Ala Ser Phe Cys Asn Lys Val Lys Lys Ile Arq 245 250 Glu Arg Tyr His Ala Ala Asp Val Asn Phe Asn Ser Gly Lys Ile Trp 265 Ser Thr Thr Thr Ala Phe Pro Tyr Gln Leu Phe Ser Lys Thr Lys Phe 275 280 Asn Ile His Ile Phe Ile Asp Asn Ser Thr Gln Pro Leu His Phe Met 295 300 Pro Cys Ala Asn Tyr Leu Val Lys Asp Leu Ile Ala Glu Ile Leu His 310 315 Phe Cys Thr Asn Asp Gln Leu Leu Pro Lys Asp His Ile Leu Ser Val 325 330 Trp Gly Ser Glu Glu Phe Leu Gln Asn Asp His Cys Leu Gly Ser His 345 Lys Met Phe Gln Lys Asp Lys Ser Val Ile Gln Leu His Leu Gln Lys 360 Ser Arg Glu Ala Pro Gly Lys Leu Ser Arg Lys His Glu Glu Asp His 375 Ser Gln Phe Tyr Leu Asn Gln Leu Leu Glu Phe Met His Ile Trp Lys 390 395 Val Ser Arg Gln Cys Leu Leu Thr Leu Ile Arg Lys Tyr Asp Phe His 405 410 Leu Lys Tyr Leu Leu Lys Thr Gln Glu Asn Val Tyr Asn Ile Ile Glu 420 425 Glu Val Lys Lys Ile Cys Ser Val Leu Gly Cys Val Glu Thr Lys Gln 440 Ile Thr Asp Ala Val Asn Glu Leu Ser Leu Ile Leu Gln Arg Lys Gly 455 460 Glu Asn Phe Tyr Gln Ser Ser Glu Thr Ser Ala Lys Gly Leu Ile Glu 470 475 Lys Val Thr Thr Glu Leu Ser Thr Ser Ile Tyr Gln Leu Ile Asn Val 485 . 490. Tyr Cys Asn Ser Phe Tyr Ala Asp Phe Gln Pro Val Asn Val Pro Arg 505 Cys Thr Ser Tyr Leu Asn Pro Gly Leu Pro Ser His Leu Ser Phe Thr 520 525 Val Tyr Ala Ala His Asn Ile Pro Glu Thr Trp Val His Arg Ile Asn 535

Phe Pro Leu Glu Ile Lys Ser Leu Pro Arg Glu Ser Met Leu Thr Val Lys Leu Phe Gly Ile Ala Cys Ala Thr Asn Asn Ala Asn Leu Leu Ala Trp Thr Cys Leu Pro Leu Phe Pro Lys Glu Lys Ser Ile Leu Gly Ser Met Leu Phe Ser Met Thr Leu Gln Ser Glu Pro Pro Val Glu Met Ile Thr Pro Gly Val Trp Asp Val Ser Gln Pro Ser Pro Val Thr Leu Gln Ile Asp Phe Pro Ala Thr Gly Trp Glu Tyr Met Lys Pro Asp Ser Glu Glu Asn Arg Ser Asn Leu Glu Glu Pro Leu Lys Glu Cys Ile Lys His Ile Ala Arg Leu Ser Gln Lys Gln Thr Pro Leu Leu Ser Glu Glu Lys Lys Arg Tyr Leu Trp Phe Tyr Arg Phe Tyr Cys Asn Asn Glu Asn Cys Ser Leu Pro Leu Val Leu Gly Ser Ala Pro Gly Trp Asp Glu Arg Thr Val Ser Glu Met His Thr Ile Leu Arg Arg Trp Thr Phe Ser Gln Pro Leu Glu Ala Leu Gly Leu Leu Thr Ser Ser Phe Pro Asp Gln Glu Ile Arg Lys Val Ala Val Gln Gln Leu Asp Asn Leu Leu Asn Asp Glu Leu Leu Glu Tyr Leu Pro Gln Leu Val Gln Ala Val Lys Phe Glu Trp Asn Leu Glu Ser Pro Leu Val Gln Leu Leu His Arg Ser Leu Gln Ser Ile Gln Val Ala His Arg Leu Tyr Trp Leu Leu Lys Asn Ala Glu Asn Glu Ala Tyr Phe Lys Ser Trp Tyr Gln Lys Leu Leu Ala Ala Leu Gln Phe Cys Ala Gly Lys Ala Leu Asn Asp Glu Phe Ser Lys Glu Gln Lys Leu Ile Lys Ile Leu Gly Asp Ile Gly Glu Arg Val Lys Ser Ala Ser Asp His Gln Arg Gln Glu Val Leu Lys Lys Glu Ile Gly Arg Leu Glu Glu Phe Phe Gln Asp Val Asn Thr Cys His Leu Pro Leu Asn Pro Ala Leu Cys Ile Lys Gly Ile Asp His Asp Ala Cys Ser Tyr Phe Thr Ser Asn Ala Leu Pro Leu Lys Ile Thr Phe Ile Asn Ala Asn Leu Met Gly Lys Asn Ile Ser Ile Ile Phe Lys Ala Gly Asp Asp Leu Arg Gln Asp Met Leu Val Leu Gln Leu Ile Gln Val Met Asp Asn Ile Trp Leu Gln Glu Gly Leu Asp Met Gln Met Ile Ile Tyr Arg Cys Leu Ser Thr Gly Lys Asp Gln Arg Leu Val Gln Met Val Pro Asp Ala Val Thr Leu Ala Lys Ile His Arg His Ser Gly Leu Ile Gly Pro Leu Lys Glu Asn Thr Ile Lys Lys Trp Phe Ser Gln His Asn His Leu Lys Ala Asp Tyr Glu Lys Ala Leu Arg Asn Phe Phe Tyr Ser Cys Ala Gly Trp Cys Val Val Thr Phe Ile Leu Gly Val Cys Asp Arg His Asn Asp Asn Ile Met Leu Thr Lys Ser Gly His Met Phe His Ile Asp Phe Gly Lys Phe Leu

Gly His Ala Gln Thr Phe Gly Gly Ile Lys Arg Asp Arg Ala Pro Phe 1060 1065 Ile Phe Thr Ser Glu Met Glu Tyr Phe Ile Thr Glu Gly Gly Lys Asn 1075 1080 1085 Pro Gln His Phe Gln Asp Phe Val Glu Leu Cys Cys Arg Ala Tyr Asn 1090 1095 1100 Ile Ile Arg Lys His Ser Gln Leu Leu Leu Asn Leu Leu Glu Met Met 1110 1115 Leu Tyr Ala Gly Leu Pro Glu Leu Ser Gly Ile Gln Asp Leu Lys Tyr 1125 1130 1135 Val Tyr Asn Asn Leu Arg Pro Gln Asp Thr Asp Leu Glu Ala Thr Ser 1140 1145 1150 His Phe Thr Lys Lys Ile Lys Glu Ser Leu Glu Cys Phe Pro Val Lys 1155 1160 1165 Leu Asn Asn Leu Ile His Thr Leu Ala Gln Met Ser Ala Ile Ser Pro 1170 1175 1180 Ala Lys Ser Thr Ser Gln Thr Phe Pro Gln Glu Ser Cys Leu Leu Ser 1185 1190 1195 Thr Thr Arg Ser Ile Glu Arg Ala Thr Ile Leu Gly Phe Ser Lys Lys 1205 1210 1215 Ser Ser Asn Leu Tyr Leu Ile Gln Val Thr His Ser Asn Asn Glu Thr 1220 1225 1230 Ser Leu Thr Glu Lys Ser Phe Glu Gln Phe Ser Lys Leu His Ser Gln 1235 1240 1245 Leu Gln Lys Gln Phe Ala Ser Leu Thr Leu Pro Glu Phe Pro His Trp 1250 1255 1260 Trp His Leu Pro Phe Thr Asn Ser Asp His Arg Arg Phe Arg Asp Leu 1265 1270 1275 1280 Asn His Tyr Met Glu Gln Ile Leu Asn Val Ser His Glu Val Thr Asn 1285 1290 Ser Asp Cys Val Leu Ser Phe Phe Leu Ser Glu Ala Gly Gln Gln Thr 1300 1305 Val Glu Glu Ser Ser Pro Val Tyr Leu Gly Glu Lys Phe Pro Asp Lys . 1315 1320 1325 Lys Pro Lys Val Gln Leu Val Ile Ser Tyr Glu Asp Val Lys Leu Thr 1330 1335 1340 Ile Leu Val Lys His Met Lys Asn Ile His Leu Pro Asp Gly Ser Ala 1345 1350 1355 1360 Pro Ser Ala His Val Glu Phe Tyr Leu Leu Pro Tyr Pro Ser Glu Val 1365 1370 1375 Arg Arg Arg Lys Thr Lys Ser Val Pro Lys Cys Thr Asp Pro Thr Tyr 1380 1385 1390 Asn Glu Ile Val Val Tyr Asp Glu Val Thr Glu Leu Gln Gly His Val 1400 1405 Leu Met Leu Ile Val Lys Ser Lys Thr Val Phe Val Gly Ala Ile Asn 1415 1420 Ile Arg Leu Cys Ser Val Pro Leu Asp Lys Glu Lys Trp Tyr Pro Leu 1425 1430 1435 Gly Asn Ser Ile Ile Xaa Pro Leu Leu Phe Tyr Thr Ser Asn Phe 1445 1450 Met Gln Ser Val Leu His 1460 1462 <210> 1098 <211> 111 <212>Amino acid <213> Homo sapiens <220> <221> misc feature <222> (1)...(111) <223> X = any amino acid or stop code

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Gly Leu Asp Ala Phe Leu Gly Leu Ala Thr Pro Lys Leu Met Val Pro Arg Glu Phe Lys Pro Thr Leu Pro Gly Arg Gly Trp Leu Val Ser Pro Phe Gly Ala Asn Pro Trp Trp Ser Val Ala Ala Ala Leu Pro Ala Leu Leu Ser Ile Leu Ile Phe Met Asp Gln Gln Ile Thr Ala Val Ile Leu Asn Arg Met Glu Tyr Arg Leu Gln Lys Gly Ala Gly Phe His Leu Asp Leu Phe Trp Val Ala Val Leu Met Leu Leu Thr Ser Ala Leu Gly Leu Pro Trp Tyr Val Ser Ala Thr Val Ile Ser Leu Ala His Met Asp Ser Leu Arg Arg Glu Ser Arg Ala Cys Ala Pro Gly Glu Arg Pro Asn Phe Leu Gly Ile Arg Glu Gln Arg Leu Thr Gly Leu Val Val Phe Ile Leu Thr Gly Ala Ser Ile Phe Leu Ala Pro Val Leu Lys Phe Ile Pro Met Pro Val Leu Tyr Gly Ile Phe Leu Tyr Met Gly Val Ala Ala Leu Ser Ser Ile Gln Phe Thr Asn Arg Val Lys Leu Leu Met Pro Ala Lys His Gln Pro Asp Leu Leu Leu Leu Arg His Val Pro Leu Thr Arg Val His Leu Phe Thr Ala Ile Ser Phe Ala Cys Leu Gly Leu Leu Trp Ile Ile Lys Ser Thr Pro Ala Ala Ile Ile Phe Pro Leu Met Leu Leu Gly Leu Val Gly Val Arg Lys Ala Leu Glu Arg Val Phe Ser Pro Gln Glu Leu Leu Trp Leu Asp Glu Leu Met Pro Glu Glu Glu Arg Ser Ile Pro Glu Lys Gly Leu Glu Pro Glu His Ser Phe Ser Gly Ser Asp Ser Glu Asp Ser Glu Leu Met Tyr Gln Pro Lys Ala Pro Glu Ile Asn Ile Ser Val Asn Xaa Leu Glu Xaa Glu Phe Val Arg Glu Ile Arg Gly Pro Ala Val Pro Arg Leu Thr Ser Ala Glu Asp Arg His Arg His Gly Pro His Ala His Ser Pro Glu Leu Gln Arg Thr Gly Arg Asp Tyr Ser Leu Asp Tyr Leu Pro Phe Arg Leu Trp Val Gly Ile Trp Val Ala Thr Phe Cys Leu Val Leu Val Ala Thr Glu Ala Ser Val Leu Val Arg Tyr Phe Thr Arg Phe Thr Glu Glu Gly Phe Cys Ala Leu Ile Ser Leu Ile Phe Ile Tyr Asp Ala Val Gly Lys Met Leu Asn Leu Thr His Thr Tyr Pro Ile Gln Lys Pro Gly Ser Ser Ala Tyr Gly Cys Leu Cys Gln Tyr Pro Gly Pro Gly Gly Asn Glu Ser Gln Trp Ile Arg Thr Arg Pro Lys . 660 Asp Arg Asp Asp Ile Val Ser Met Asp Leu Gly Leu Ile Asn Ala Ser Leu Leu Pro Pro Pro Glu Cys Thr Arg Gln Gly Gly His Pro Arg Gly Pro Gly Cys His Thr Val Pro Asp Ile Ala Phe Phe Ser Leu Leu Leu 715 720 Phe Leu Thr Ser Phe Phe Phe Ala Met Ala Leu Lys Cys Val Lys Thr

Ser Arg Phe Phe Pro Ser Val Val Arg Lys Gly Leu Ser Asp Phe Ser 745 Ser Val Leu Ala Ile Leu Leu Gly Cys Gly Leu Asp Ala Phe Leu Gly 760 Leu Ala Thr Pro Lys Leu Met Val Pro Arg Glu Phe Lys Pro Thr Leu 775 Pro Gly Arg Gly Trp Leu Val Ser Pro Phe Gly Ala Asn Pro Trp Trp 795 Trp Ser Val Ala Ala Ala Leu Pro Ala Leu Leu Leu Ser Ile Leu Ile 810 Phe Met Asp Gln Gln Ile Thr Ala Val Ile Leu Asn Arg Met Glu Tyr 825 Arg Leu Gln Lys Gly Ala Gly Phe His Leu Asp Leu Phe Cys Val Ala 840 Val Leu Met Leu Leu Thr Ser Ala Leu Gly Leu Pro Trp Tyr Val Ser 855 Ala Thr Val Ile Ser Leu Ala His Met Asp Ser Leu Arg Arg Glu Ser 870 875 Arg Ala Cys Ala Pro Gly Glu Arg Pro Asn Phe Leu Gly Ile Arg Glu 885 890 Gln Arg Leu Thr Gly Leu Val Val Phe Ile Leu Thr Gly Ala Ser Ile 900 905 Phe Leu Ala Pro Val Leu Lys Phe Ile Pro Met Pro Val Leu Tyr Gly 915 · 920 925 Ile Phe Leu Tyr Met Gly Val Ala Ala Leu Ser Ser Ile Gln Phe Thr 930 935 940 Asn Arg Val Lys Leu Leu Leu Asp Ala Ser Lys Thr Pro Ala Arg Pro 950 955 960 Ala Thr Leu Ala Ala Cys Ala Ser Asp Gln Gly Pro Pro Leu His Ser 970 975 965 His Gln Leu Cys Pro Val Trp Gly Cys Phe Gly Ile Ile Lys Ser Thr 980 985 990 Pro Ala Ala Ile Ile Phe Pro Leu Met Leu Leu Gly Leu Val Gly Val 995 1000 1005 Arg Lys Ala Leu Glu Arg Val Phe Ser Pro Gln Glu Leu Leu Trp Leu 1010 1015 1020 Asp Glu Leu Met Pro Glu Glu Glu Arg Ser Ile Pro Glu Lys Gly Leu 1025 1030 1035 Glu Pro Glu His Ser Phe Ser Gly Ser Asp Ser Glu Asp Ser Glu Leu 1045 1050 1055 Met Tyr Gln Pro Lys Ala Pro Glu Ile Asn Ile Ser Val Asn 1060 1065

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545 550 555 Arg Ile Lys Tyr Leu Gln Thr Arg Ile Asp Met Ile Phe Thr Pro Gly 565 570 Pro Pro Ser Thr Pro Lys His Lys Lys Ser Gln Lys Gly Ser Ala Phe 580 585 Thr Phe Pro Ser Gln Gln Ser Pro Arg Asn Glu Pro Tyr Val Ala Arg 600 605 Pro Ser Thr Ser Glu Ile Glu Asp Gln Arg His Xaa Trp Gly Lys Phe 615 620 Val Lys Ser Leu Lys Gly Gln Val Gln Gly Leu Gly Arg Lys Leu Asp 630 635 Phe Leu Val Asp Met His Met Gln His Met Glu Arg Leu Gln Val Gln 650 Val Thr Glu Tyr Tyr Pro Thr Lys Gly Thr Ser Ser Pro Ala Glu Ala 665 Glu Lys Lys Glu Asp Asn Arg Tyr Ser Asp Leu Lys Thr Ile Ile Cys 680 Asn Tyr Ser Glu Thr Gly Pro Pro Glu Pro Pro Tyr Ser Phe His Gln 695 Val Thr Ile Asp Lys Val Ser Pro Tyr Gly Phe Phe Ala His Asp Pro 710 715 Val Asn Leu Pro Arg Gly Gly Pro Ser Ser Gly Lys Val Gln Ala Thr 725 730 Pro Pro Ser Ser Ala Thr Thr Tyr Val Glu Arg Pro Thr Val Leu Pro 740 745 Ile Leu Thr Leu Leu Asp Ser Arg Val Ser Cys His Ser Gln Ala Asp 760 Leu Gln Gly Pro Tyr Ser Asp Arg Ile Ser Pro Arg Gln Arg Arg Ser 775 780 Ile Thr Arg Asp Ser Asp Thr Pro Leu Ser Leu Met Ser Val Asn His 790 795 Glu Glu Leu Glu Arg Ser Pro Ser Gly Phe Ser Ile Ser Gln Asp Arg 810 Asp Asp Tyr Val Phe Gly Pro Asn Gly Gly Ser Ser Trp Met Arg Glu 825 Lys Arg Tyr Leu Ala Glu Gly Glu Thr Asp Thr Asp Thr Asp Pro Phe 835 840 Thr Pro Ser Gly Ser Met Pro Leu Ser Ser Thr Gly Asp Gly Ile Ser 855 Asp Ser Val Trp Thr Pro Ser Asn Lys Pro Ile 870

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Gln Arg Lys Gly Val Phe Leu Trp Thr Phe Pro Ser Pro Gly Trp Pro Glu Ala Phe Val Leu His Leu Ser Gly Val Gln Ser Ser Ala Pro Gly Gly Ala Gln Leu Arg Ser Gly Phe Ile Val Ala Glu Ile Glu Pro Met Gly Val Phe Gln Phe Ser Thr Ser Ser Arg Asn Ile Ile Val Ser Glu Asp Thr Gln Met Ile Arg Leu His Val Gln Arg Leu Phe Gly Phe His Ser Asp Leu Ile Lys Val Ser Tyr Gln Thr Thr Ala Gly Ser Ala Lys Pro Leu Glu Asp Phe Glu Pro Val Gln Asn Gly Glu Leu Phe Phe Gln Lys Phe Gln Thr Glu Val Asp Phe Glu Ile Thr Ile Ile Asn Asp Gln Leu Ser Glu Ile Glu Glu Phe Phe Tyr Ile Asn Leu Thr Ser Val Glu Ile Arg Gly Leu Gln Lys Phe Asp Val Asn Trp Ser Pro Arg Leu Asn Leu Asp Phe Ser Val Ala Val Ile Thr Ile Leu Asp Asn Asp Asp Leu Ala Gly Met Asp Ile Ser Phe Pro Glu Thr Thr Val Ala Val Ala Val Asp Thr Thr Leu Ile Pro Val Glu Thr Glu Ser Thr Thr Tyr Leu Ser Thr Ser Lys Thr Thr Ile Leu Gln Pro Thr Asn Val Val Ala Ile Val Thr Glu Ala Thr Gly Val Ser Ala Ile Pro Glu Lys Leu Val Thr Leu His Gly Thr Pro Ala Val Ser Glu Lys Pro Asp Val Ala Thr Val Thr Ala Asn Val Ser Ile His Gly Thr Phe Ser Leu Gly Pro Ser Ile Val Tyr Ile Glu Glu Glu Met Lys Asn Gly Thr Phe Asn Thr Ala Glu Val Leu Ile Arg Arg Thr Gly Gly Phe Thr Gly Asn Val Ser Ile Thr Val Lys Thr Phe Gly Glu Arg Cys Ala Gln Met Glu Pro Asn Ala Leu Pro Phe Arg Gly Ile Tyr Gly Ile Ser Asn Leu Thr Trp Ala Val Glu Glu Glu Asp Phe Glu Glu Gln Thr Leu Thr Leu Ile Phe Leu Asp Gly Glu Arg Glu Arg Lys Val Ser Val Gln Ile Leu Asp Asp Glu Pro Glu Gly Gln Glu Phe Phe Tyr Val Phe Leu Thr Asn Pro Gln Gly Gly Ala Gln Ile Val Glu Gly Lys Asp Asp Thr Gly Phe Ala Ala Phe Ala Met Val Ile Ile Thr Gly Ser Asp Leu His Asn Gly Ile Ile Gly Phe Ser Glu Glu Ser Gln Ser Gly Leu Glu Leu Arg Glu Gly Ala Val Met Arg Arg Leu His Leu Ile Val Thr Arg Gln Pro Asn Arg Ala Phe Glu Asp Val Lys Val Phe Trp Arg Val Thr Leu Asn Lys Thr Val Val Val Leu Gln Lys Asp Gly Val Asn Leu Met Glu Glu Leu Gln Ser Val Ser Gly Thr Thr Thr Cys Thr Met Gly Gln Thr Lys Cys Phe Ile Ser Ile Glu Leu Lys Pro Glu Lys Val Pro Gln Val Glu Val Tyr Phe Phe Val

Glu Leu Tyr Glu Ala Thr Ala Gly Ala Ala Ile Asn Asn Ser Ala Arg 1080 1085 Phe Ala Gln Ile Lys Ile Leu Glu Ser Asp Glu Ser Gln Ser Leu Val 1095 1100 Tyr Phe Ser Val Gly Ser Arg Leu Ala Val Ala His Lys Lys Ala Thr 1105 1110 1115 Leu Ile Ser Leu Gln Val Ala Arg Asp Ser Gly Thr Gly Leu Met Met 1125 1130 Ser Val Asn Phe Ser Thr Gln Glu Leu Arg Ser Ala Glu Thr Ile Gly 1140 1145 1150 Arg Thr Ile Ile Ser Pro Ala Ile Ser Gly Lys Asp Phe Val Ile Thr 1155 1160 1165 Glu Gly Thr Leu Val Phe Glu Pro Gly Gln Arg Ser Thr Val Leu Asp 1175 1180 Val Ile Leu Thr Pro Glu Thr Gly Ser Leu Asn Ser Phe Pro Lys Arg 1190 1195 Phe Gln Ile Val Leu Phe Asp Pro Lys Gly Gly Ala Arg Ile Asp Lys 1205 1210 Val Tyr Gly Thr Ala Asn Ile Thr Leu Val Ser Asp Ala Asp Ser Gln 1220 1225 Ala Ile Trp Gly Leu Ala Asp Gln Leu His Gln Pro Val Asn Asp Asp 1240 1245 Ile Leu Asn Arg Val Leu His Thr Ile Ser Met Lys Val Ala Thr Glu 1250 1255 1260 Asn Thr Asp Glu Gln Leu Ser Ala Met Met His Leu Ile Glu Lys Ile 1270 1275 1280 Thr Thr Glu Gly Lys Ile Gln Ala Phe Ser Val Ala Ser Arg Thr Leu 1295 1285 1290 Phe Tyr Glu Ile Leu Cys Ser Leu Ile Asn Pro Lys Arg Lys Asp Thr 1300 1305 1310 Arg Gly Phe Ser His Phe Ala Glu Leu Thr Glu Asn Phe Ala Phe Ser 1315 1320 Leu Leu Thr Asn Val Thr Cys Gly Ser Pro Gly Glu Lys Ser Lys Thr 1330 1335 1340 Ile Leu Asp Ser Cys Pro Tyr Leu Ser Ile Leu Ala Leu His Trp Tyr 1350 1355 Pro Gln Gln Ile Asn Gly His Lys Phe Glu Gly Lys Glu Gly Asp Tyr 1365 1370 1375 Ile Arg Ile Pro Glu Arg Leu Leu Asp Val Gln Asp Ala Glu Ile Met 1380 1385 1390 Ala Gly Lys Ser Thr Cys Lys Leu Val Gln Phe Thr Glu Tyr Ser Ser 1395 1400 1405 Gln Gln Trp Phe Ile Ser Gly Asn Asn Leu Pro Thr Leu Lys Asn Lys 1415 1420 Val Leu Ser Leu Ser Val Lys Gly Gln Ser Ser Gln Leu Leu Thr Asn 1430 1435 1440 Asp Asn Glu Val Leu Tyr Arg Ile Tyr Ala Ala Glu Pro Arg Ile Ile 1445 1450 1455 Pro Gln Thr Ser Leu Cys Leu Leu Trp Asn Gln Ala Ala Ser Trp 1465 1470 Leu Ser Asp Ser Gln Phe Cys Lys Val Ile Glu Glu Thr Ala Asp Tyr 1475 1480 1485 Val Glu Cys Ala Cys Leu His Met Ser Val Tyr Ala Val Tyr Ala Arg 1495 1500 Thr Asp Asn Leu Ser Ser Tyr Asn Glu Ala Phe Phe Thr Ser Gly Phe 1510 . 1515 1520 Ile Cys Ile Ser Gly Leu Cys Leu Ala Val Leu Ser His Ile Phe Cys 1525 1535 1530 Ala Arg Tyr Ser Met Phe Ala Ala Lys Leu Leu Thr His Met Met Ala 1540 1545 1550 Ala Ser Leu Gly Thr Gln Ile Leu Phe Leu Ala Ser Ala Tyr Ala Ser 1560 1565 Pro Gln Leu Ala Glu Glu Ser Cys Ser Ala Met Ala Ala Val Thr His 1570 1575 1580

Tyr Leu Tyr Leu Cys Gln Phe Ser Trp Met Leu Ile Gln Ser Val Asn 1590 1595 Phe Trp Tyr Val Leu Val Met Asn Asp Glu His Thr Glu Arg Arg Tyr 1605 1610 Leu Leu Phe Phe Leu Leu Ser Trp Gly Leu Pro Ala Phe Val Val Ile 1620 1625 1630 Leu Leu Ile Val Ile Leu Lys Gly Ile Tyr His Gln Ser Met Ser Gln 1635 1640 1645 Ile Tyr Gly Leu Ile His Gly Asp Leu Cys Phe Ile Pro Asn Val Tyr 1650 1655 1660 Ala Ala Leu Phe Thr Ala Ala Leu Val Pro Leu Thr Cys Leu Val Val 1675 1680 1670 Val Phe Val Val Phe Ile His Ala Tyr Gln Val Lys Pro Gln Trp Lys 1685 1690 1695 Ala Tyr Asp Asp Val Phe Arg Gly Arg Thr Asn Ala Ala Glu Ile Pro 1700 1705 1710 Leu Ile Leu Tyr Leu Phe Ala Leu Ile Ser Val Thr Trp Leu Trp Gly 1715 1720 1725 Gly Leu His Met Ala Tyr Arg His Phe Trp Met Leu Val Leu Phe Val 1730 1735 1740 Ile Phe Asn Ser Leu Gln Leu Leu Tyr Pro Leu Phe Tyr Phe Leu Leu 1745 1750 1755 1760 Leu Xaa Asp Gln Ser Ser Ser Ala Ser Pro Gly Gly Val Asp Tyr Ile 1765 . 1770 1775 Leu His Gly Ser Thr Val Thr Phe Gln His Gly Gln Asn Leu Ser Phe 1785 1790 1780 Ile Asn Ile Ser Ile Ile Asp Asp Asn Glu Ser Glu Phe Glu Glu Pro 1800 1805 Ile Glu Ile Leu Leu Thr Gly Ala Thr Gly Gly Ala Val Leu Gly Arg 1810 1815 1820 His Leu Val Ser Arg Ile Ile Ile Ala Lys Ser Asp Ser Pro Phe Gly 1825 1830 1835 Val Ile Arg Phe Leu Asn Gln Ser Lys Ile Ser Ile Ala Asn Pro Asn . 1845 1850 1855 Ser Thr Met Ile Leu Ser Leu Val Leu Glu Arg Thr Gly Gly Leu Leu 1860 1865 1870 Gly Glu Ile Gln Val Asn Trp Glu Thr Val Gly Pro Asn Ser Gln Glu 1875 1880 1885 Ala Leu Leu Pro Gln Asn Arg Asp Ile Ala Asp Pro Val Ser Gly Leu 1895 1900 Phe Tyr Phe Gly Glu Gly Glu Gly Val Arg Thr Ile Ile Leu Thr 1910 1915 Ile Tyr Pro His Glu Glu Ile Glu Val Glu Glu Thr Phe Ile Ile Lys 1930 Leu His Leu Val Lys Gly Glu Ala Lys Leu Asp Ser Arg Ala Lys Asp 1945 1950 Val Thr Leu Thr Ile Gln Glu Phe Gly Asp Pro Asn Gly Val Val Gln 1960 1965 Phe Ala Pro Glu Thr Leu Ser Lys Lys Thr Tyr Ser Glu Pro Leu Ala 1975 Leu Glu Gly Pro Leu Leu Ile Thr Phe Phe Val Arg Arg Val Lys Gly 1990 1995 Thr Phe Gly Glu Ile Met Val Tyr Trp Glu Leu Ser Ser Glu Phe Asp 2005 2010 Ile Thr Glu Asp Phe Leu Ser Thr Ser Gly Phe Phe Thr Ile Ala Asp 2020 2025 2030 Gly Glu Ser Glu Ala Ser Phe Asp Val His Leu Leu Pro Asp Glu Val 2035 2040 2045 Pro Glu Ile Glu Glu Asp Tyr Val Ile Gln Leu Val Ser Val Glu Gly 2055 2060 . Gly Ala Glu Leu Asp Leu Glu Lys Ser Ile Thr Trp Phe Ser Val Tyr 2065 2070 2075 2080 Ala Asn Asp Asp Pro His Gly Val Phe Ala Leu Tyr Ser Asp Arg Gln 2085 2090 2095

Ser Ile Leu Ile Gly Gln Asn Leu Ile Arg Ser Ile Gln Ile Asn Ile 2105 Thr Arg Leu Ala Gly Thr Phe Gly Asp Val Ala Val Gly Leu Arg Ile 2120 2115 2125 Ser Ser Asp His Lys Glu Gln Pro Ile Val Thr Glu Asn Ala Glu Arg 2135 2140 Gln Leu Val Val Lys Asp Gly Ala Thr Tyr Lys Val Asp Val Val Pro 2145 2150 2155 Ile Lys Asn Gln Val Phe Leu Ser Leu Gly Ser Asn Phe Thr Leu Gln 2165 2170 2175 Leu Val Thr Val Met Leu Val Gly Gly Arg Phe Tyr Gly Met Pro Thr 2180 2185 Ile Leu Gln Glu Ala Lys Ser Ala Val Leu Pro Val Ser Glu Lys Ala 2195 2200 2205 Ala Asn Ser Gln Val Gly Phe Glu Ser Thr Ala Phe Gln Leu Met Asn 2215 2220 Ile Thr Ala Gly Thr Ser His Val Met Ile Ser Arg Arg Gly Thr Tyr 2230 2235 Gly Ala Leu Ser Val Ala Trp Thr Thr Gly Tyr Ala Pro Gly Leu Glu 2245 2250 2255 Ile Pro Glu Phe Ile Val Val Gly Asn Met Thr Pro Thr Leu Gly Ser 2260 2265 2270 Leu Ser Phe Ser His Gly Glu Gln Arg Lys Gly Val Phe Leu Trp Thr 2275 2280 2285 Phe Pro Ser Pro Gly Trp Pro Glu Ala Phe Val Leu His Leu Ser Gly 2295 2300 Val Gln Ser Ser Ala Pro Gly Gly Ala Gln Leu Arg Ser Gly Phe Ile 2310 2315 Val Ala Glu Ile Glu Pro Met Gly Val Phe Gln Phe Ser Thr Ser Ser 2325 2330 2335 Arg Asn Ile Ile Val Ser Glu Asp Thr Gln Met Ile Arg Leu His Val 2340 2345 2350 Gln Arg Leu Phe Gly Phe His Ser Asp Leu Ile Lys Val Ser Tyr Gln 2355 2360 2365 Thr Thr Ala Gly Ser Ala Lys Pro Leu Glu Asp Phe Glu Pro Val Gln 2370 2375 2380 Asn Gly Glu Leu Phe Phe Gln Lys Phe Gln Thr Glu Val Asp Phe Glu 2390 2395 Ile Thr Ile Ile Asn Asp Gln Leu Ser Glu Ile Glu Glu Phe Phe Tyr 2405 2410 Ile Asn Leu Thr Ser Val Glu Ile Arg Gly Leu Gln Lys Phe Asp Val 2425 Asn Trp Ser Pro Arg Leu Asn Leu Asp Phe Ser Val Ala Val Ile Thr 2435 2440 2445 Ile Leu Asp Asn Asp Asp Leu Ala Gly Met Asp Ile Ser Phe Pro Glu 2455 2460 Thr Thr Val Ala Val Ala Val Asp Thr Thr Leu Ile Pro Val Glu Thr 2470 2475 Glu Ser Thr Thr Tyr Leu Ser Thr Ser Lys Thr Thr Thr Ile Leu Gln 2485 2490 2495 Pro Thr Asn Val Val Ala Ile Val Thr Glu Ala Thr Gly Val Ser Ala 2500 2505 2510 Ile Pro Glu Lys Leu Val Thr Leu His Gly Thr Pro Ala Val Ser Glu 2515 2520 2525 Lys Pro Asp Val Ala Thr Val Thr Ala Asn Val Ser Ile His Gly Thr 2535 2540 Phe Ser Leu Gly Pro Ser Ile Val Tyr Ile Glu Glu Met Lys Asn 2550 2555 Gly Thr Phe Asn Thr Ala Glu Val Leu Ile Arg Arg Thr Gly Gly Phe 2565 2570 Thr Gly Asn Val Ser Ile Thr Val Lys Thr Phe Gly Glu Arg Cys Ala 2585 2590 Gln Met Glu Pro Asn Ala Leu Pro Phe Arg Gly Ile Tyr Gly Ile Ser 2600

Asn Leu Thr Trp Ala Val Glu Glu Glu Asp Phe Glu Glu Gln Thr Leu 2615 Thr Leu Ile Phe Leu Asp Gly Glu Arg Glu Arg Lys Val Ser Val Gln 2630 2635 Ile Leu Asp Asp Glu Pro Glu Gly Gln Glu Phe Phe Tyr Val Phe 2645 2650 Leu Thr Asn Pro Gln Gly Gly Ala Gln Ile Val Glu Gly Lys Asp Asp , 2660 2665 Thr Gly Phe Ala Ala Phe Ala Met Val Ile Ile Thr Gly Ser Asp Leu 2675 2680 2685 His Asn Gly Ile Ile Gly Phe Ser Glu Glu Ser Gln Ser Gly Leu Glu 2700 2690 2695 Leu Arg Glu Gly Ala Val Met Arg Arg Leu His Leu Ile Val Thr Arg 2710 2715 Gln Pro Asn Arg Ala Phe Glu Asp Val Lys Val Phe Trp Arg Val Thr 2725 2730 2735 Leu Asn Lys Thr Val Val Val Leu Gln Lys Asp Gly Val Asn Leu Met 2740 2745 Glu Glu Leu Gln Ser Val Ser Gly Thr Thr Thr Cys Thr Met Gly Gln 2755 2760 2765 Thr Lys Cys Phe Ile Ser Ile Glu Leu Lys Pro Glu Lys Val Pro Gln 2780 2770 2775 Val Glu Val Tyr Phe Phe Val Glu Leu Tyr Glu Ala Thr Ala Gly Ala 2790 2795 Ala Ile Asn Asn Ser Ala Arg Phe Ala Gln Ile Lys Ile Leu Glu Ser 2805 2810 2815 Asp Glu Ser Gln Ser Leu Val Tyr Phe Ser Val Gly Ser Arg Leu Ala 2820 2825 2830 Val Ala His Lys Lys Ala Thr Leu Ile Ser Leu Gln Val Ala Arg Asp 2835 2840 2845 Ser Gly Thr Gly Leu Met Met Ser Val Asn Phe Ser Thr Gln Glu Leu 2855 2860 Arg Ser Ala Glu Thr Ile Gly Arg Thr Ile Ile Ser Pro Ala Ile Ser 2865 2870 2875 Gly Lys Asp Phe Val Ile Thr Glu Gly Thr Leu Val Phe Glu Pro Gly 2885 2890 Gln Arg Ser Thr Val Leu Asp Val Ile Leu Thr Pro Glu Thr Gly Ser 2900 2905 2910 Leu Asn Ser Phe Pro Lys Arg Phe Gln Ile Val Leu Phe Asp Pro Lys 2915 2920 2925 Gly Gly Ala Arg Ile Asp Lys Val Tyr Gly Thr Ala Asn Ile Thr Leu 2930 2935 2940 Val Ser Asp Ala Asp Ser Gln Ala Ile Trp Gly Leu Ala Asp Gln Leu 2950 ^{*} 2955 2960 His Gln Pro Val Asn Asp Asp Ile Leu Asn Arg Val Leu His Thr Ile 2965 2970 2975 Ser Met Lys Val Ala Thr Glu Asn Thr Asp Glu Gln Leu Ser Ala Met 2985 2980 2990 Met His Leu Ile Glu Lys Ile Thr Thr Glu Gly Lys Ile Gln Ala Phe 3000 Ser Val Ala Ser Arg Thr Leu Phe Tyr Glu Ile Leu Cys Ser Leu Ile 3010 3015 3020 Asn Pro Lys Arg Lys Asp Thr Arg Gly Phe Ser His Phe Ala Glu Leu 3030 3035 Thr Glu Asn Phe Ala Phe Ser Leu Leu Thr Asn Val Thr Cys Gly Ser 3045 3050 3055 Pro Gly Glu Lys Ser Lys Thr Ile Leu Asp Ser Cys Pro Tyr Leu Ser 3060 3065 3070 Ile Leu Ala Leu His Trp Tyr Pro Gln Gln Ile Asn Gly His Lys Phe 3080 3085 Glu Gly Lys Glu Gly Asp Tyr Ile Arg Ile Pro Glu Arg Leu Leu Asp 3090 3095 3100 Val Gln Asp Ala Glu Ile Met Ala Gly Lys Ser Thr Cys Lys Leu Val 3105 3110 3115

Gln Phe Thr Glu Tyr Ser Ser Gln Gln Trp Phe Ile Ser Gly Asn Asn 3125 3130 Leu Pro Thr Leu Lys Asn Lys Val Leu Ser Leu Ser Val Lys Gly Gln 3140 3145 Ser Ser Gln Leu Leu Thr Asn Asp Asn Glu Val Leu Tyr Arg Ile Tyr 3155 3160 3165 Ala Ala Glu Pro Arg Ile Ile Pro Gln Thr Ser Leu Cys Leu Leu Trp 3170 3175 3180 Asn Gln Ala Ala Ser Trp Leu Ser Asp Ser Gln Phe Cys Lys Val 3190 3195 Ile Glu Glu Thr Ala Asp Tyr Val Glu Cys Ala Cys Leu His Met Ser 3205 3210 3215 Val Tyr Ala Val Tyr Ala Arg Thr Asp Asn Leu Ser Ser Tyr Asn Glu 3225 3230 3220 Ala Phe Phe Thr Ser Gly Phe Ile Cys Ile Ser Gly Leu Cys Leu Ala 3235 3240 3245 Val Leu Ser His Ile Phe Cys Ala Arg Tyr Ser Met Phe Ala Ala Lys 3250 3255 3260 Leu Leu Thr His Met Met Ala Ala Ser Leu Gly Thr Gln Ile Leu Phe 3265 3270 3275 3280 Leu Ala Ser Ala Tyr Ala Ser Pro Gln Leu Ala Glu Glu Ser Cys Ser 3285 3290 3295 Ala Met Ala Ala Val Thr His Tyr Leu Tyr Leu Cys Gln Phe Ser Trp 3300 3305 3310 Met Leu Ile Gln Ser Val Asn Phe Trp Tyr Val Leu Val Met Asn Asp 3315 3320 3325 Glu His Thr Glu Arg Arg Tyr Leu Leu Phe Phe Leu Leu Ser Trp Gly 3330 3335 3340 Leu Pro Ala Phe Val Val Ile Leu Leu Ile Val Ile Leu Lys Gly Ile 3350 3355 3360 Tyr His Gln Ser Met Ser Gln Ile Tyr Gly Leu Ile His Gly Asp Leu 3365 3370 3375 Cys Phe Ile Pro Asn Val Tyr Ala Ala Leu Phe Thr Ala Ala Leu Val 3380 3385 3390 Pro Leu Thr Cys Leu Val Val Val Phe Val Val Phe Ile His Ala Tyr 3395 3400 3405 Gln Val Lys Pro Gln Trp Lys Ala Tyr Asp Asp Val Phe Arg Gly Arg 3415 3420 Thr Asn Ala Ala Glu Ile Pro Leu Ile Leu Tyr Leu Phe Ala Leu Ile 3430 3435 Ser Val Thr Trp Leu Trp Gly Gly Leu His Met Ala Tyr Arg His Phe 3445 3450 3455 Trp Met Leu Val Leu Phe Val Ile Phe Asn Ser Leu Gln Leu Leu Val 3460 3465 3470 Pro Ser Val Leu Leu Phe Thr Ser Met Arg Ser Thr Phe Phe Ser Phe 3475 3480 3485 His Thr Gly Thr Leu Thr Ser Arg Glu Lys Lys Ser Thr Phe Val Leu 3495 3500 Thr Cys Leu Leu Ser Pro Asp Ser Lys Gly Leu Gly Val Leu Cys Phe 3505 3510 3515 Leu Asn Thr Glu Trp Ala Phe Gln Val His . 3525

<210> 1102 <211> 945 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(945) <223> X = any amino acid or stop code

<400> 1102 Ala Ala Gly Ala Thr Met Glu Arg Asp Gly Cys Ala Gly Gly Gly Ser 10 Arg Gly Gly Gly Gly Arg Ala Pro Arg Glu Gly Pro Ala Gly Asn 25 Gly Arg Asp Arg Gly Arg Ser His Ala Ala Glu Ala Pro Gly Asp Pro 40 Gln Ala Ala Ser Leu Leu Ala Pro Met Asp Val Gly Glu Glu Pro · 55 Leu Glu Lys Ala Ala Arg Ala Arg Thr Ala Lys Asp Pro Asn Thr Tyr 70 75 Lys Val Leu Ser Leu Val Leu Ser Val Cys Val Leu Thr Thr Ile Leu 90 Gly Cys Ile Phe Gly Leu Lys Pro Ser Cys Ala Lys Glu Val Lys Ser 105 Cys Lys Gly Arg Cys Phe Glu Arg Thr Phe Gly Asn Cys Arg Cys Asp 120 Ala Ala Cys Val Glu Leu Gly Asn Cys Cys Leu Gly Leu Pro Gly Gly 135 140 Thr Cys Ile Glu Pro Glu His Ile Trp Thr Cys Asn Lys Phe Arg Cys 150 155 160 Gly Glu Lys Arg Leu Thr Arg Ser Leu Cys Ala Cys Ser Asp Asp Cys 165 170 175 Lys Asp Arg Gly Asp Cys Leu Pro Ser Asn Leu Gln Phe Leu Cys Val 185 190 180 Gln Gly Glu Lys Ser Trp Gly Arg Lys Asn Pro Cys Glu Ser His Leu 195 200 205 Met Glu Pro Gln Cys Pro Ala Gly Phe Glu Thr Pro Ser Leu Pro Leu 220 215 Leu Ile Phe Ser Leu Asp Gly Phe Arg Ala Glu Tyr Leu His Thr Trp 230 235 240 Gly Gly Leu Leu Pro Val Ile Ser Lys Leu Lys Lys Cys Gly Thr Tyr 250 Thr Lys Asn Met Arg Pro Val Tyr Pro Thr Lys Thr Phe Pro Asn His 270 265 Tyr Ser Ile Val Thr Gly Leu Tyr Pro Glu Ser His Gly Ile Ile Asn 280 285 Asn Lys Met Tyr Asp Pro Lys Met Asn Ala Ser Phe Ser Leu Lys Ser 295 Lys Glu Lys Phe Asn Pro Glu Trp Tyr Lys Gly Glu Pro Ile Trp Val 310 315 Thr Ala Lys Tyr Gln Gly Leu Lys Ser Gly Thr Phe Phe Trp Pro Gly 325 330 335 Ser Asp Val Glu Ile Asn Gly Ile Phe Pro Asp Ile Tyr Lys Met Tyr 340 345 Asn Gly Ser Val Pro Phe Glu Glu Arg Ile Leu Ala Val Leu Gln Trp 360 Leu Gln Leu Pro Lys Asp Glu Arg Pro His Phe Tyr Thr Leu Tyr Leu 380 375 Glu Glu Pro Asp Ser Ser Gly His Ser Tyr Gly Pro Val Ser Ser Glu 395 400 390 Val Ile Lys Ala Leu Gln Arg Val Asp Gly Met Val Gly Met Leu Met 410 Asp Gly Leu Lys Glu Leu Asn Leu His Arg Cys Leu Asn Leu Ile Leu 420 425 Ile Ser Asp His Gly Met Glu Gln Gly Ser Cys Lys Lys Tyr Ile Tyr 440 Leu Asn Lys Tyr Leu Gly Asp Val Lys Asn Ile Lys Val Ile Tyr Gly 455 460 Pro Ala Ala Arg Leu Arg Pro Ser Asp Val Pro Asp Lys Tyr Tyr Ser

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470
                                     475
Phe Asn Tyr Glu Gly Ile Ala Arg Asn Leu Ser Cys Arg Glu Pro Asn
              485
                                 490
Gln His Phe Lys Pro Tyr Leu Lys His Phe Leu Pro Lys Arg Leu His
                              505
Phe Ala Lys Ser Asp Arg Ile Glu Pro Leu Thr Phe Tyr Leu Asp Pro
                          520
Gln Trp Gln Leu Ala Leu Asn Pro Ser Glu Arg Lys Tyr Cys Gly Ser
                     535
                                         540
Gly Phe His Gly Ser Asp Asn Val Phe Ser Asn Met Gln Ala Leu Phe
                  550
                                     555
Val Gly Tyr Gly Pro Gly Phe Lys His Gly Ile Glu Ala Asp Thr Phe
               565
                                  570
Glu Asn Ile Glu Val Tyr Asn Leu Met Cys Asp Leu Leu Asn Leu Thr
                              585
Pro Ala Pro Asn Asn Gly Thr His Gly Ser Leu Asn His Leu Leu Lys
                          600
                                             605
Asn Pro Val Tyr Thr Pro Lys His Pro Lys Glu Val His Pro Leu Val
                     615
                                         620
Gln Cys Pro Phe Thr Arg Asn Pro Arg Asp Asn Leu Gly Cys Ser Cys
                  630
                                     635
Asn Pro Ser Ile Leu Pro Ile Glu Asp Phe Gln Thr Gln Phe Asn Leu
                                 650
Thr Val Ala Glu Glu Lys Ile Ile Lys His Glu Thr Leu Pro Tyr Gly
                             665
Arg Pro Arg Val Leu Gln Lys Glu Asn Thr Ile Cys Leu Leu Ser Gln
                         680
His Gln Phe Met Ser Gly Tyr Ser Gln Asp Ile Leu Met Pro Leu Trp
                  695
                              700
Thr Ser Tyr Thr Val Asp Arg Asn Asp Ser Phe Ser Thr Glu Asp Phe
                       715
                  710
Ser Asn Cys Leu Tyr Gln Asp Phe Arg Ile Pro Leu Ser Pro Val His
              725
                                 730 735
Lys Cys Ser Phe Tyr Lys Asn Asn Thr Lys Val Ser Tyr Gly Phe Leu
           740 745
Ser Pro Pro Gln Leu Asn Lys Asn Ser Ser Gly Ile Tyr Ser Glu Ala
                          760
                                             765
Leu Leu Thr Thr Asn Ile Val Pro Met Tyr Gln Ser Phe Gln Val Ile
                      775
                                         780
Trp Arg Tyr Phe His Asp Thr Leu Leu Arg Lys Tyr Ala Glu Glu Arg
                  790
                                      795
Asn Gly Val Asn Val Val Ser Gly Pro Val Phe Asp Phe Asp Tyr Asp
              805
                                 810
Gly Arg Cys Asp Ser Leu Glu Asn Leu Arg Gln Lys Arg Arg Val His
          820
                              825
Pro Val Thr Gln Glu Asn Phe Trp Ile Pro Asn Ser Thr Ser Phe Tyr
                          840
Val Val Leu Thr Ser Cys Lys Asp Thr Ser Gln Thr Pro Leu His Cys
                      855
Glu Asn Leu Asp Thr Leu Gly Phe Pro Phe Cys Leu His Arg Asp Trp
                  870
                                     875
Ile Asn Ser Glu Thr Cys Val His Gly Lys His Asp Ser Ser Trp Val
                                 890
Glu Glu Phe Val Lys Cys Leu His Arg Ala Arg Ile Thr Gly Cys Xaa
                              905
Gly Thr Ser Leu Gly Leu Ser Phe Tyr Gln Gln Arg Lys Glu Pro Val
                          920
                                             925
Ser Asp Ile Leu Lys Leu Lys Thr His Leu Pro Thr Phe Ser Gln Glu
Asp
945
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<210> 1103

<211> 217 <212>Amino acid <213> Homo sapiens

<400> 1103 Thr Val Pro Pro Pro Pro Gly Gly Pro Ser Pro Ala Pro Leu His Pro . 10 Lys Arg Ser Pro Thr Ser Thr Gly Glu Ala Glu Leu Lys Glu Glu Arg Leu Pro Gly Arg Lys Ala Ser Cys Ser Thr Ala Gly Ser Gly Ser Arg 40 Gly Leu Pro Pro Leu Ser Pro Met Val Ser Ser Ala His Asn Pro Asn Lys Ala Glu Ile Pro Glu Arg Arg Lys Asp Ser Thr Ser Thr Pro Asn Asn Leu Pro Pro Ser Met Met Thr Arg Arg Asn Thr Tyr Val Cys Thr 85 90 Glu Arg Pro Gly Ala Glu Arg Pro Ser Leu Leu Pro Asn Gly Lys Glu 100 105 110 Asn Ser Ser Gly Thr Pro Arg Val Pro Pro Ala Ser Pro Ser Ser His 115 120 125 Ser Leu Ala Pro Pro Ser Gly Glu Arg Ser Arg Leu Ala Arg Gly Ser 130 135 140 Thr Ile Arg Ser Thr Phe His Gly Gly Gln Val Arg Asp Arg Ala 150 155 160 Gly Gly Trp Gly Trp Phe Phe Asn Lys His Ala Leu Gln Arg Ala Pro 165 170 175 Arg Asn Ala Gly Ala Pro Ser Leu Met Pro Gly His Arg Thr Val Leu 180 185 Ile Asn Tyr Gly Gly Gly Gln Asp Leu Lys Asn Trp Glu Thr Cys Leu 195 200 Ala Ala Pro Pro Asn Lys His Arg Arg 215 217

<210> 1104 <211> 436 <212>Amino acid <213> Homo sapiens

<400> 1104 His Thr Leu His His Ser Ser Pro Thr Ser Glu Ala Glu Glu Phe Val 10 Ser Arg Leu Ser Thr Gln Asn Tyr Phe Arg Ser Leu Pro Arg Gly Thr 25 Ser Asn Met Thr Tyr Gly Thr Phe Asn Phe Leu Gly Gly Arg Leu Met 40 Ile Pro Asn Thr Gly Ile Ser Leu Leu Ile Pro Pro Asp Ala Ile Pro . 60 55 Arg Gly Lys Ile Tyr Glu Ile Tyr Leu Thr Leu His Lys Pro Glu Asp 70 Val Arg Leu Pro Leu Ala Gly Cys Gln Thr Leu Leu Ser Pro Ile Val 90 Ser Cys Gly Pro Pro Gly Val Leu Leu Thr Arg Pro Val Ile Leu Gly 105 110 Met Asp His Cys Gly Glu Pro Ser Pro Asp Ser Trp Ser Leu Arg Leu

115 120 Lys Lys Gln Ser Cys Glu Gly Ser Trp Glu Asp Val Leu His Leu Gly 135 140 Glu Glu Ala Pro Ser His Leu Tyr Tyr Cys Gln Leu Glu Ala Ser Ala 150 155 Cys Tyr Val Phe Thr Glu Gln Leu Ser Arg Tyr Ala Leu Val Gly Glu 165 170 Ala Leu Ser Val Ala Ala Ala Lys Arg Leu Lys Leu Leu Leu Phe Ala 180 185 Pro Val Ala Cys Thr Ser Leu Glu Tyr Asn Ile Leu Val Tyr Cys Leu 200 His Asp Thr His Asp Ala Leu Asn Val Val Gln Leu Glu Lys Gln 215 220 Leu Gln Gly Gln Leu Ile Gln Glu Pro Leu Val Leu His Phe Lys Asp 230 235 Ser Tyr His Asn Leu Arg Leu Ser Ile His Asp Val Pro Ser Ser Leu 245 250 Trp Lys Ser Lys Leu Leu Val Ser Tyr Gln Glu Ile Pro Phe Tyr His 260 265 Ile Trp Asn Gly Thr Gln Arg Tyr Leu His Cys Thr Phe Thr Leu Glu 275 280 Arg Val Ser Pro Ser Thr Ser Asp Leu Ala Cys Lys Leu Trp Val Trp 295 300 Gln Val Glu Gly Asp Gly Gln Ser Phe Ser Ile Asn Phe Asn Ile Thr 310 315 Lys Asp Thr Arg Phe Ala Glu Leu Leu Ala Leu Glu Ser Glu Ala Gly 325 330 Val Pro Ala Leu Val Gly Pro Ser Ala Phe Lys Ile Pro Phe Leu Ile 345 Arg Gln Lys Ile Ile Ser Ser Leu Asp Pro Pro Cys Arg Arg Gly Ala 355 360 Asp Trp Arg Thr Leu Ala Gln Lys Leu His Leu Asp Ser His Leu Ser 375 380 Phe Phe Ala Ser Lys Pro Ser Pro Thr Ala Met Ile Leu Asn Leu Trp 390 395 Glu Ala Arg His Phe Pro Asn Gly Asn Leu Ser Gln Leu Ala Ala Ala 405 410 Val Ala Gly Thr Gly Pro Ala Gly Arg Trp Leu Leu Ser Gln Cys Ser 420 425 Glu Ala Glu Cys 435 436

<210> 1105 <211> 113 <212>Amino acid <213> Homo sapiens

85 90 95
Ser Arg Ile Arg Gly Met Arg Lys Leu Ser Pro Pro Gln Lys Lys Ser
100 105 110
Val

113

<210> 1106 <211> 464 <212>Amino acid <213> Homo sapiens

<400> 1106

Ile Met Leu Asp Gly Arg Val Arg Trp Leu Thr Pro Val Ile Ser Ala 10 Leu Trp Glu Ala Glu Met Glu Asp Val Ile Ala Arg Met Gln Asp Glu 20 25 Lys Asn Gly Ile Pro Ile Arg Thr Val Lys Ser Phe Leu Ser Lys Ile 35 40 Pro Ser Val Phe Ser Gly Ser Asp Ile Val Gln Trp Leu Ile Lys Asn 55 60 Leu Thr Ile Glu Asp Pro Val Glu Ala Leu His Leu Gly Thr Leu Met 70 75 Ala Ala His Gly Tyr Phe Phe Pro Ile Ser Asp His Val Leu Thr Leu 85 90 Lys Asp Asp Gly Thr Phe Tyr Arg Phe Gln Thr Pro Tyr Phe Trp Pro 105 Ser Asn Cys Trp Glu Pro Glu Asn Thr Asp Tyr Ala Val Tyr Leu Cys 120 Lys Arg Thr Met Gln Asn Lys Ala Arg Leu Glu Leu Ala Asp Tyr Glu 130 135 140 Ala Glu Ser Leu Ala Arg Leu Gln Arg Ala Phe Ala Arg Lys Trp Glu 150 Phe Ile Phe Met Gln Ala Glu Ala Gln Ala Lys Val Asp Lys Lys Arg 165 170 Asp Lys Ile Glu Arg Lys Ile Leu Asp Ser Gln Glu Arg Ala Phe Trp 180 185 Asp Val His Arg Pro Val Pro Gly Cys Val Asn Thr Thr Glu Val Asp 200 205 Ile Lys Lys Ser Ser Arg Met Arg Asn Pro His Lys Thr Arg Lys Ser 215 220 Val Tyr Gly Leu Gln Asn Asp Ile Arg Ser His Ser Pro Thr His Thr 230 235 Pro Thr Pro Glu Thr Lys Pro Pro Thr Glu Asp Glu Leu Gln Gln 250 Ile Lys Tyr Trp Gln Ile Gln Leu Asp Arg His Arg Leu Lys Met Ser 265 Lys Val Ala Asp Ser Leu Leu Ser Tyr Thr Glu Gln Tyr Leu Glu Tyr 280 Asp Pro Phe Leu Leu Pro Pro Asp Pro Ser Asn Pro Trp Leu Ser Asp 295 Asp Thr Thr Phe Trp Glu Leu Glu Ala Ser Lys Glu Pro Ser Gln Gln 310 315 Arg Val Lys Arg Trp Gly Phe Gly Met Asp Glu Ala Leu Lys Asp Pro 325 330 Val Gly Arg Glu Gln Phe Leu Lys Phe Leu Glu Ser Glu Phe Ser Ser 345 Glu Asn Leu Arg Phe Trp Leu Ala Val Glu Asp Leu Lys Lys Arg Pro 355 360 365 Ile Lys Glu Val Pro Ser Arg Val Gln Glu Ile Trp Gln Glu Phe Leu

Ala Pro Gly Ala Pro Ser Ala Ile Asn Leu Asp Ser Lys Ser Tyr Asp 385

Lys Thr Thr Gln Asn Val Lys Glu Pro Gly Arg Tyr Thr Phe Glu Asp 400

Ala Gln Glu His Ile Tyr Lys Leu Met Lys Ser Asp Ser Tyr Pro Arg 420

Phe Ile Arg Ser Ser Ala Tyr Gln Glu Leu Leu Gln Ala Lys Lys Lys 435

Gly Lys Ser Leu Thr Ser Lys Arg Leu Thr Ser Leu Ala Gln Ser Tyr 466

<210> 1107 <211> 153 <212>Amino acid <213> Homo sapiens

<400> 1107 Gly Thr Arg Asp Tyr Pro Arg Ile Val Asn His Leu Asp His Thr Tyr 10 Val Thr Ala Pro Gln Ala Phe Met Met Phe Gln Tyr Phe Val Lys Val 25 Val Pro Thr Val Tyr Met Lys Val Asp Gly Glu Val Leu Thr Thr Asn 40 Gln Ile Tyr Val Thr Arg His Glu Lys Ala Ala Tyr Val Leu Met Gly 55 60 Asp Gln Gly Leu Pro Gly Val Phe Ile Leu Tyr Glu Leu Ser Pro Met 70 75 Met Val Asn Leu Thr Glu Ile His Thr Phe Phe Ser Leu Phe Leu Thr 85 90 Ile Val Gly Ala Thr Ile Gly Gly Met Phe Phe Glu His Phe Val Ile 100 105 Asn Tyr Leu Thr His Lys Trp Gly Leu Gly Phe Tyr Phe Lys Asn Glu 120 125 Asn Ser Leu Gln Gly Gly His Arg Thr Leu Tyr Gly Val Asn Phe Phe 135 Met Tyr Trp Ser Leu Arg Gly Gly Ser 150

<210> 1108 <211> 506 <212>Amino acid <213> Homo sapiens

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55
                                          60
Pro Asp Pro Leu Asp Thr Arg Arg Leu Gln Gly Phe Arg Leu Glu Glu
                                      75
Tyr Leu Ile Gly Gln Ser Ile Gly Lys Gly Cys Ser Ala Ala Val Tyr
Glu Ala Thr Met Pro Thr Leu Pro Gln Asn Leu Glu Val Thr Lys Ser
                              105
Thr Gly Leu Leu Pro Gly Arg Gly Pro Gly Thr Ser Ala Pro Gly Glu
                          120
Gly Gln Glu Arg Ala Pro Gly Ala Pro Ala Phe Pro Leu Ala Ile Lys
                      135
                                         140
Met Met Trp Asn Ile Ser Ala Gly Ser Ser Ser Glu Ala Ile Leu Asn
                  150
                                     155
Thr Met Ser Gln Glu Leu Val Pro Ala Ser Arg Val Ala Leu Ala Gly
              165
                                 170
Glu Tyr Gly Ala Val Thr Tyr Arg Lys Ser Lys Arg Gly Pro Lys Gln
          180
                              185
Leu Ala Pro His Pro Asn Ile Ile Arg Val Leu Arg Ala Phe Thr Ser
                         200 .
Ser Val Pro Leu Leu Pro Gly Ala Leu Val Asp Tyr Pro Asp Val Leu
   210 215
                                         220
Pro Ser Arg Leu His Pro Glu Gly Leu Gly His Gly Arg Thr Leu Phe
                 230
                                     235
Leu Val Met Lys Asn Tyr Pro Cys Thr Leu Arg Gln Tyr Leu Cys Val
                              250
Asn Thr Pro Ser Pro Arg Leu Ala Ala Met Met Leu Leu Gln Leu Leu
                             265
Glu Gly Val Asp His Leu Val Gln Gln Gly Ile Ala His Arg Asp Leu
                         280
                                            285
Lys Ser Asp Asn Ile Leu Val Glu Leu Asp Pro Asp Gly Cys Pro Trp
          295
Leu Val Ile Ala Asp Phe Gly Cys Cys Leu Ala Asp Glu Ser Ile Gly
                 310
Leu Gln Leu Pro Phe Ser Ser Trp Tyr Val Asp Arg Gly Gly Asn Gly
              325 330
Cys Leu Met Ala Pro Glu Val Ser Thr Ala Arg Pro Gly Pro Arg Ala
     340 345
Val Ile Asp Tyr Ser Lys Ala Asp Ala Trp Ala Val Gly Ala Ile Ala
               360
Tyr Glu Ile Phe Gly Leu Val Asn Pro Phe Tyr Gly Gln Gly Lys Ala
                     375
His Leu Glu Ser Arg Ser Tyr Gln Glu Ala Gln Leu Pro Ala Leu Pro
                  390
                                     395
Glu Ser Val Pro Pro Asp Val Arg Gln Leu Val Arg Ala Leu Leu Gln
                                 410
Arg Glu Ala Ser Lys Arg Pro Ser Ala Arg Val Ala Ala Asn Val Leu
                             425
His Leu Ser Leu Trp Gly Glu His Ile Leu Ala Leu Lys Asn Leu Lys
Leu Asp Lys Met Val Gly Trp Leu Leu Gln Gln Ser Ala Ala Thr Leu
                      455
Leu Ala Asn Arg Leu Thr Glu Lys Cys Cys Val Glu Thr Lys Met Lys
                  470
                                    475
Met Leu Phe Leu Ala Asn Leu Glu Cys Glu Thr Leu Cys Gln Ala Ala
              485
                                 490
Leu Leu Cys Ser Trp Arg Ala Ala Leu
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<210> 1109 <211> 382 <212>Amino acid <213> Homo sapiens

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<400> 1109
Arg Pro Leu Arg Leu Ala Glu Leu Pro Asp His Cys Tyr Arg Met
                                  10
Asn Ser Ser Pro Ala Gly Thr Pro Ser Pro Gln Pro Ser Arg Ala Asn
                               25
Gly Asn Ile Asn Leu Gly Pro Ser Ala Asn Pro Asn Ala Gln Pro Thr
                           40
Asp Phe Asp Phe Leu Lys Val Ile Gly Lys Gly Asn Tyr Gly Lys Val
Leu Leu Ala Lys Arg Lys Ser Asp Gly Ala Phe Tyr Ala Val Lys Val
Leu Gln Lys Lys Ser Ile Leu Lys Lys Glu Gln Ser His Ile Met
               85
                                  90
Ala Glu Arg Ser Val Leu Leu Lys Asn Val Arg His Pro Phe Leu Val
                             105
Gly Leu Arg Tyr Ser Phe Gln Thr Pro Glu Lys Leu Tyr Phe Val Leu
       115
                          120 .
                                            125
Asp Tyr Val Asn Gly Gly Glu Leu Phe Phe His Leu Gln Arg Glu Arg
                     135
Arg Phe Leu Glu Pro Arg Ala Arg Phe Tyr Ala Ala Glu Val Ala Ser
                 150
                                    155
Ala Ile Gly Tyr Leu His Ser Leu Asn Ile Ile Tyr Arg Asp Leu Lys
              165
                                 170
Pro Glu Asn Ile Leu Leu Asp Cys Gln Gly His Val Val Leu Thr Asp
          180
                             185
Phe Gly Leu Cys Lys Glu Gly Val Glu Pro Glu Asp Thr Thr Ser Thr
                          200
                                            205
Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val Leu Arg Lys Glu
                      215
                                         220
Pro Tyr Asp Arg Ala Val Asp Trp Trp Cys Leu Gly Ala Val Leu Tyr
                  230
                                     235
Glu Met Leu His Gly Leu Pro Pro Phe Tyr Ser Gln Asp Val Ser Gln
              245
                                250
Met Tyr Glu Asn Ile Leu His Gln Pro Leu Gln Ile Pro Gly Gly Arg
          260
                265
Thr Val Ala Ala Cys Asp Leu Leu Gln Ser Leu Leu His Lys Asp Gln
                         280
                                             285
Arg Gln Arg Leu Gly Ser Lys Ala Asp Phe Leu Glu Ile Lys Asn His
                     295
                                         300
Val Phe Phe Ser Pro Ile Asn Trp Asp Asp Leu Tyr His Lys Arg Leu
                  310
                                     315
Thr Pro Pro Phe Asn Pro Asn Val Thr Gly Pro Ala Asp Leu Lys His
              325
                                 330
Phe Asp Pro Glu Phe Thr Gln Glu Ala Val Ser Lys Ser Ile Gly Cys
                             345
Thr Pro Asp Thr Val Ala Ser Ser Ser Gly Ala Ser Ser Ala Phe Leu
                          360
Gly Phe Ser Tyr Ala Pro Glu Asp Asp Asp Ile Leu Asp Cys
                      375
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<210> 1110 <211> 535 <212>Amino acid <213> Homo sapiens

<400> 1110 Arg Pro Gln Thr Leu Lys Gly His Gln Glu Lys Ile Arg Gln Arg Gln 10 Ser Ile Leu Pro Pro Pro Gln Gly Pro Ala Pro Ile Pro Phe Gln His 25 Arg Gly Gly Asp Ser Pro Glu Ala Lys Asn Arg Val Gly Pro Gln Val Pro Leu Ser Glu Pro Gly Phe Arg Arg Glu Ser Gln Glu Glu Pro Arg Ala Val Leu Ala Gln Lys Ile Glu Lys Glu Thr Gln Ile Leu Asn 70 Cys Ala Leu Asp Asp Ile Glu Trp Phe Val Ala Arg Leu Gln Lys Ala 85 90 Ala Glu Ala Phe Lys Gln Leu Asn Gln Arg Lys Lys Gly Lys Lys 100 105 Gly Lys Lys Ala Pro Ala Glu Gly Val Leu Thr Leu Arg Ala Arg Pro 115 120 Pro Ser Glu Gly Glu Phe Ile Asp Cys Phe Gln Lys Ile Lys Leu Ala 130 135 Ile Asn Leu Leu Ala Lys Leu Gln Lys His Ile Gln Asn Pro Ser Ala 150 155 160 Ala Glu Leu Val His Phe Leu Phe Gly Pro Leu Asp Leu Ile Val Asn 165 170 175 Thr Cys Ser Gly Pro Asp Ile Ala Arg Ser Val Ser Cys Pro Leu Leu 180 185 190 Ser Arg Asp Ala Val Asp Phe Leu Arg Gly His Leu Val Pro Lys Glu 200 205 Met Ser Leu Trp Glu Ser Leu Gly Glu Ser Trp Met Arg Pro Arg Ser 220 215 Glu Trp Pro Arg Glu Pro Gln Val Pro Leu Tyr Val Pro Lys Phe His 230 235 Ser Gly Trp Glu Pro Pro Val Asp Val Leu Gln Glu Ala Pro Trp Glu 245 250 Val Glu Glu Leu Ala Ser Ala Pro Ile Glu Glu Val Ser Pro Val Ser 260 265 Arg Gln Ser Ile Arg Asn Ser Gln Lys His Ser Pro Thr Ser Glu Pro 280 Thr Pro Pro Gly Asp Ala Leu Pro Pro Val Ser Ser Pro His Thr His 295 300 Arg Gly Tyr Gln Pro Thr Pro Ala Met Ala Lys Tyr Val Lys Ile Leu 310 315 Tyr Asp Phe Thr Ala Arg Asn Ala Asn Glu Leu Ser Val Leu Lys Asp 325 330 Glu Val Leu Glu Val Leu Glu Asp Gly Arg Gln Trp Trp Lys Leu Arg 345 Ser Arg Ser Gly Gln Ala Gly Tyr Val Pro Cys Asn Ile Leu Gly Glu 360 . 365 Ala Arg Pro Glu Asp Ala Gly Ala Pro Phe Glu Gln Ala Gly Gln Lys 375 380 Tyr Trp Gly Pro Ala Ser Pro Thr His Lys Leu Pro Pro Ser Phe Pro 390 395 Gly Asn Lys Asp Glu Leu Met Gln His Met Asp Glu Val Asn Asp Glu 405 410 Leu Ile Arg Lys Ile Ser Asn Ile Arg Ala Gln Pro Gln Arg His Phe 420 425 Arg Val Glu Arg Ser Gln Pro Val Ser Gln Pro Leu Thr Tyr Glu Ser 440 Gly Pro Asp Glu Val Arg Ala Trp Leu Glu Ala Lys Ala Phe Ser Pro 455 Arg Ile Val Glu Asn Leu Gly Ile Leu Thr Gly Pro Gln Leu Phe Ser 465 470 475 Leu Asn Lys Glu Glu Leu Lys Lys Val Cys Gly Glu Glu Gly Val Arg 485 490 Val Tyr Ser Gln Leu Thr Met Gln Lys Ala Phe Leu Glu Lys Gln Gln

Ser Gly Ser Glu Leu Glu Glu Leu Met Asn Lys Phe His Ser Met Asn 515

Gln Arg Arg Gly Glu Asp Ser 535

<210> 1111
<211> 346
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(346)
<223> X = any amino acid or stop code

<400> 1111

Ala Trp His Glu Gly Leu Val Ser Ser Pro Ala Ile Gly Ala Tyr Leu 10 Ser Ala Ser Tyr Gly Asp Ser Leu Val Val Leu Val Ala Thr Val Val 25 Ala Leu Leu Asp Ile Cys Phe Ile Leu Val Ala Val Pro Glu Ser Leu 40 Pro Glu Lys Met Arg Pro Val Ser Trp Gly Ala Gln Ile Ser Trp Lys 55 Gln Ala Asp Pro Phe Ala Ser Leu Lys Lys Val Gly Lys Asp Ser Thr 70 Val Leu Leu Ile Cys Ile Thr Val Cys Leu Ser Tyr Leu Pro Glu Ala 85 90 Gly Gln Tyr Ser Ser Phe Phe Leu Tyr Leu Arg Gln Val Ile Gly Phe 105 Gly Ser Val Lys Ile Ala Ala Phe Ile Ala Met Val Gly Ile Leu Ser 120 125 Ile Val Ala Gln Thr Ala Phe Leu Ser Ile Leu Met Arg Ser Leu Gly 135 140 Asn Lys Asn Thr Val Leu Leu Gly Leu Gly Phe Gln Met Leu Gln Leu 155 Ala Trp Tyr Gly Phe Gly Ser Gln Ala Trp Met Met Trp Ala Ala Gly 165 170 Thr Val Ala Ala Met Ser Ser Ile Thr Phe Pro Ala Ile Ser Ala Leu 185 190 Val Ser Arg Asn Ala Glu Ser Asp Gln Gln Gly Val Ala Gln Gly Ile 200 Ile Thr Gly Ile Arg Gly Leu Cys Asn Gly Leu Gly Pro Ala Leu Tyr 215 Gly Phe Ile Phe Tyr Met Phe His Val Glu Leu Thr Glu Leu Gly Pro 230 235 Lys Leu Asn Ser Asn Asn Val Pro Leu Gln Gly Ala Val Ile Pro Gly 245 250 Pro Pro Phe Leu Phe Gly Ala Cys Ile Val Leu Met Ser Phe Leu Ala 265 Ala Leu Phe Ile Pro Glu Tyr Ser Lys Ala Ser Gly Val Gln Lys His 280 Ser Asn Ser Ser Ser Gly Ser Leu Thr Asn Thr Pro Glu Arg Gly Ser 295 300 Asp Glu Asp Ile Glu Pro Leu Leu Gln Asp Ser Ser Ile Trp Glu Leu 310 315 Ser Ser Phe Glu Glu Pro Gly Asn Gln Cys Thr Glu Leu Xaa Thr Arg 325 330

Gln Lys Val Gly Phe Cys Ile Arg His Leu 340 345 346

<210> 1112 <211> 647 <212>Amino acid <213> Homo sapiens

<400> 1112 Met Ala Ala Gly Leu Ala Thr Trp Leu Pro Phe Ala Arg Ala Ala Ala Val Gly Trp Leu Pro Leu Ala Gln Gln Pro Leu Pro Pro Ala Pro Gly Val Lys Ala Ser Arg Gly Asp Glu Val Leu Val Val Asn Val Ser Gly 40 Arg Arg Phe Glu Thr Trp Lys Asn Thr Leu Asp Arg Tyr Pro Asp Thr 55 Leu Leu Gly Ser Ser Glu Lys Glu Phe Phe Tyr Asp Ala Asp Ser Gly 70 Glu Tyr Phe Phe Asp Arg Asp Pro Asp Met Phe Arg His Val Leu Asn 90 Phe Tyr Arg Thr Gly Arg Leu His Cys Pro Arg Gln Glu Cys Ile Gln 105 Ala Phe Asp Glu Glu Leu Ala Phe Tyr Gly Leu Val Pro Glu Leu Val 120 Gly Asp Cys Cys Leu Glu Glu Tyr Arg Asp Arg Lys Lys Glu Asn Ala 135 Glu Arg Leu Ala Glu Asp Glu Glu Ala Glu Gln Ala Gly Asp Gly Pro 145 150 Ala Leu Pro Ala Gly Ser Ser Leu Arg Gln Arg Leu Trp Arg Ala Phe 165 170 Glu Asn Pro His Thr Ser Thr Ala Ala Leu Val Phe Tyr Tyr Val Thr 180 185 Gly Phe Phe Ile Ala Val Ser Val Ile Ala Asn Val Val Glu Thr Ile 200 205 Pro Cys Arg Gly Ser Ala Arg Arg Ser Ser Arg Glu Gln Pro Cys Gly 215 220 Glu Arg Phe Pro Gln Ala Phe Phe Cys Met Asp Thr Ala Cys Val Leu 235 Ile Phe Thr Gly Glu Tyr Leu Leu Arg Leu Phe Ala Ala Pro Ser Arg 245 250 Cys Arg Phe Leu Arg Ser Val Met Ser Leu Ile Asp Val Val Ala Ile Leu Pro Tyr Tyr Ile Gly Leu Leu Val Pro Lys Asn Asp Asp Val Ser 280 Gly Ala Phe Val Thr Leu Arg Val Phe Arg Val Phe Arg Ile Phe Lys 295 Phe Ser Arg His Ser Gln Gly Leu Arg Ile Leu Gly Tyr Thr Leu Lys 310 315 Ser Cys Ala Ser Glu Leu Gly Phe Leu Leu Phe Ser Leu Thr Met Ala 325 330 Ile Ile Ile Phe Ala Thr Val Met Phe Tyr Ala Glu Lys Gly Thr Asn 345 Lys Thr Asn Phe Thr Ser Ile Pro Ala Ala Phe Trp Tyr Thr Ile Val 360 Thr Met Thr Thr Leu Gly Tyr Gly Asp Met Val Pro Ser Thr Ile Ala 375 380 Gly Lys Ile Phe Gly Ser Ile Cys Ser Leu Ser Gly Val Leu Val Ile 385 395

Ala Leu Pro Val Pro Val Ile Val Ser Asn Phe Ser Arg Ile Tyr His 405 410 Gln Asn Gln Arg Ala Asp Lys Arg Arg Ala Gln Gln Lys Val Arg Leu 425 Ala Arg Ile Arg Leu Ala Lys Ser Gly Thr Thr Asn Ala Phe Leu Gln 440 Tyr Lys Gln Asn Gly Gly Leu Glu Asp Ser Gly Ser Gly Glu Glu 455 Ala Val Cys Val Arg Asn Arg Ser Ala Phe Glu Gln His His His 470 475 Leu Leu His Cys Leu Glu Lys Thr Thr Cys His Glu Phe Thr Asp Glu 490 Leu Thr Phe Ser Glu Ala Leu Gly Ala Val Ser Pro Gly Gly Arg Thr 505 Ser Arg Ser Thr Ser Val Ser Ser Gln Pro Val Gly Pro Gly Ser Leu 520 525 Leu Ser Ser Cys Cys Pro Arg Arg Ala Lys Arg Arg Ala Ile Arg Leu 535 Ala Asn Ser Thr Ala Ser Val Ser Arg Gly Ser Met Gln Glu Leu Asp 555 Met Leu Ala Gly Leu Arg Arg Ser His Ala Pro Gln Ser Arg Ser Ser 565 570 Leu Asn Ala Lys Pro His Asp Ser Leu Asp Leu Asn Cys Asp Ser Gly 580 585 Asp Phe Val Ala Ala Ile Ile Ser Ile Pro Thr Pro Pro Ala Asn Thr 600 Pro Asp Glu Ser Gln Pro Ser Ser Pro Gly Gly Gly Arg Ala Gly 615 Ser Thr Leu Arg Asn Ser Ser Leu Gly Thr Pro Cys Leu Phe Pro Glu 630 635 Thr Val Lys Ile Ser Ser Leu 645

<210> 1113 <211> 220 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(220) <223> X = any amino acid or stop code

<400> 1113 Gly Trp Gly Lys Pro Phe Lys Asp Trp Thr Thr Gly Gly Gln Asp Thr 10 Gly Gly Glu Pro Ala Leu Leu Val Gly Ala Gly Glu Gly Arg Ala Pro 25 Arg Leu Asn Cys Pro Ser Gly Gln Ile Arg Ser Pro Gly Pro Gly Asp 40 Leu Ser Ile Tyr Asp Asn Trp Ile Arg Tyr Phe Asn Arg Ser Ser Pro 55 Val Tyr Gly Leu Val Pro Arg Ser Lys Thr Ser Ala Arg Ile Tyr Pro 75 Thr Tyr His Thr Ala Phe Asp Thr Phe Asp Tyr Val Asp Lys Phe Leu 90 Asp Pro Gly Glu Glu Gly Asp Lys Gly His Pro Glu Thr Arg Thr Gly 105 Glu Ala Glu Asp Xaa Ala Leu Ala Leu Ser Pro Cys Arg Arg Phe Ser

120 115 Ser His Gln Ala Val Ala Arg Thr Ala Gly Ser Val Ile Leu Arg Leu 135 140 Ser Asp Ser Phe Phe Leu Pro Leu Lys Val Ser Asp Tyr Ser Glu Thr 150 155 Leu Arg Ser Phe Leu Gln Ala Ala Gln Gln Asp Leu Gly Ala Leu Leu 170 Glu Gln His Ser Ile Ser Leu Gly Pro Leu Val Thr Ala Val Glu Lys 185 190 Phe Glu Ala Glu Ala Ala Leu Gly Gln Arg Ile Ser Thr Leu Gln 195 200 Lys Gly Ser Pro Asp Pro Leu Gln Val Arg Met Leu 210 215

<210> 1114 <211> 382 <212>Amino acid <213> Homo sapiens

<400> 1114 Gly Ile Arg Gly Gly Gly Ser Leu Ala Ser Gly Gly Pro Gly Pro Gly His Ala Ser Leu Ser Gln Arg Leu Arg Leu Tyr Leu Ala Asp Ser Trp 25 Asn Gln Cys Asp Leu Val Ala Leu Thr Cys Phe Leu Leu Gly Val Gly 40 Cys Arg Leu Thr Pro Gly Leu Tyr His Leu Gly Arg Thr Val Leu Cys 55 60 Ile Asp Phe Met Val Phe Thr Val Arg Leu Leu His Ile Phe Thr Val 70 75 80 Asn Lys Gln Leu Gly Pro Lys Ile Val Ile Val Ser Lys Met Met Lys 85 90 . 95 Asp Val Phe Phe Leu Phe Phe Leu Gly Val Trp Leu Val Ala Tyr 100 105 110 Gly Val Ala Thr Glu Gly Leu Leu Arg Pro Arg Asp Ser Asp Phe Pro 120 125 Ser Ile Leu Arg Arg Val Phe Tyr Arg Pro Tyr Leu Gln Ile Phe Gly 135 Gln Ile Pro Gln Glu Asp Met Asp Val Ala Leu Met Glu His Ser Asn 150 155 Cys Ser Ser Glu Pro Gly Phe Trp Ala His Pro Pro Gly Ala Gln Ala 165 170 Gly Thr Cys Val Ser Gln Tyr Ala Asn Trp Leu Val Val Leu Leu Leu 185 Val Ile Phe Leu Leu Val Ala Asn Ile Leu Leu Val Asn Leu Leu Ile 200 Ala Met Phe Ser Tyr Thr Phe Gly Lys Val Gln Gly Asn Ser Asp Leu 215 220 Tyr Trp Lys Ala Gln Arg Tyr Arg Leu Ile Arg Glu Phe His Ser Arg 235 230 Pro Ala Leu Ala Pro Pro Phe Ile Val Ile Ser His Leu Arg Leu Leu 250 245 Leu Arg Gln Leu Cys Arg Arg Pro Arg Ser Pro Gln Pro Ser Ser Pro 265 260 Ala Leu Glu His Phe Arg Val Tyr Leu Ser Lys Glu Ala Glu Arg Lys 280 Leu Leu Thr Trp Glu Ser Val His Lys Glu Asn Phe Leu Leu Ala Arg 295 300 Ala Arg Asp Lys Arg Glu Ser Asp Ser Glu Arg Leu Lys Arg Thr Ser

<210> 1115 <211> 109 <212>Amino acid <213> Homo sapiens

<210> 1116 <211> 679 <212>Amino acid <213> Homo sapiens

<400> 1116 Pro Leu Leu

Leu Pro Leu Leu His Ala Gly Phe Asn Arg Arg Phe Met Glu Asn Ser 10 Ser Ile Ile Ala Cys Tyr Asn Glu Leu Ile Gln Ile Glu His Gly Glu 2.0 25 Val Arg Ser Gln Phe Lys Leu Arg Ala Cys Asn Ser Val Phe Thr Ala 35 40 Leu Asp His Cys His Glu Ala Ile Glu Ile Thr Ser Asp Asp His Val 55 Ile Gln Tyr Val Asn Pro Ala Phe Glu Arg Met Met Gly Tyr His Lys 70 75 Gly Glu Leu Leu Gly Lys Glu Leu Ala Asp Leu Pro Lys Ser Asp Lys 90 Asn Arg Ala Asp Leu Leu Asp Thr Ile Asn Thr Cys Ile Lys Lys Gly 100 105 110 Lys Glu Trp Gln Gly Val Tyr Tyr Ala Arg Arg Lys Ser Gly Asp Ser 120 Ile Gln Gln His Val Lys Ile Thr Pro Val Ile Gly Gln Gly Gly Lys

- 1-	130		- m1			135		_	_	_	140			· _	
145					150					155					Asn 160
Asn	Lys	Gln	Ile	His 165		Ile	His	Arg	Asp 170		Gly	Asp	Asn	Ser 175	Gln
Thr	Glu	Pro	His 180		Phe	Arg	Tyr	Lys 185		Arg	Arg	Lys	Glu 190		Ile
Asp	Val	Lys 195	Ser	Ile	Ser	Ser	Arg 200	_	Ser	Asp	Ala	Pro 205	_		Gln
Asn	Arg 210	Arg	Tyr	Pro	Ser	Met 215	Ala		Ile	His	Ser 220		Thr	Ile	Glu
Ala 225	Pro	Ile	Thr	Lys	Val 230	Ile		Ile	Ile	Asn 235		Ala	Gln	Glu	Asn 240
	Pro	Val	Thr	Val 245	Ala		Ala	Leu	Asp 250	Arg	Val	Leu	Glu	Ile 255	
Arg	Thr	Thr	Glu 260			Ser	Pro	Gln 265	Leu		Thr	Lys	Asp 270		Asp
Pro	His	Thr 275	Ser	Asp	Leu	Val	Gly 280	Gly		Met	Thr	Asp 285		Leu	Arg
Arg	Leu 290		Gly	Asn	Glu	Tyr 295			Thr	Lys	Asn 300		His	Gln	Ser
His 305		His	Leu	Ala	Met 310		Ile	Thr	Ile	Asn 315		Val	Pro	Pro	Суз 320
	Ser	Gln	Leu	Leu		Asn	Glu	Glu	Ser		Asp	Phe	Asn	Ile	
				325					330					335	
			Ala 340					345					350		
		355	Ser				360					365			
	370		Arg			375					380		_		
385	7		Tyr		390					395					400
			Phe	405					410					415	
			Val 420					425					430		_
		435	Arg				440					445			
	450		Tyr			455					460		_		
Leu 465	Ala	Phe	Gln	Leu	Thr 470	Val	Lys	Asp	Thr	Lys 475	Cys	Asn	Ile	Phe	Lys 480
Asn	Ile	Asp	Arg	Gly 485	Asn	His	Tyr	Arg	Thr 490	Leu	Arg	Gln	Ala	Ile 495	
Asp	Met	Val	Leu 500	Ala	Thr	Glu	Met	Thr 505	Lys	His	Phe	Glu	His 510		Asn
Lys	Phe	Val 515	Asn	Ser	Ile	Asn	Lys 520		Met	Ala	Ala	Glu 525		Glu	Gly
Ser	Asp 530	Cys	Glu	Cys	Asn	Pro 535	Ala	Gly	Lys	Asn	Phe 540		Glu	Asn	Gln
Ile 545	Leu	Ile	Lys	Arg	Met 550	Met	Ile	Lys	Cys	Ala 555	Asp	Val	Ala	Asn	Pro 560
	Arg	Pro	Leu			Cys	Ile	Glu			Gly	Arg	Ile		
Glu	Tyr	Phe	Ala 580	565 Gln	Thr	Asp	Glu		570 Lys	Arg	Gln	Gly		575 Pro	Val
Val	Met	Pro 595	Val	Phe	Asp	Arg	Asn 600	585 Thr	Cys	Ser	Ile	Pro 605	590 Lys	Ser	Gln
Ile	Ser 610		Ile	Asp	Tyr	Phe 615		Thr	Asp	Met	Phe 620		Ala	Trp	Asp
Ala 625		Ala	His	Leu	Pro 630		Leu	Met	Gln	His 635		Ala	Asp	Asn	Tyr 640
	His	Trp	Lys	Thr		Asp	Asp	Leu	Lys		Lys	Ser	Leu	Arg	

Pro Ser Asp Arg Leu Lys Pro Ser His Arg Gly Gly Leu Leu Thr Asp 660

Lys Gly His Cys Glu Ser Gln
675

<210> 1117 <211> 1193 <212>Amino acid <213> Homo sapiens

<400> 1117 Ala Phe Leu Ser Lys Val Glu Glu Asp Asp Tyr Pro Ser Glu Glu Leu Leu Glu Asp Glu Asn Ala Ile Asn Ala Lys Arg Ser Lys Glu Lys Asn 20 Pro Gly Asn Gln Gly Arg Gln Phe Asp Val Asn Leu Gln Val Pro Asp 40 Arg Ala Val Leu Gly Thr Ile His Pro Asp Pro Glu Ile Glu Glu Ser 55 Lys Gln Glu Thr Ser Met Ile Leu Asp Ser Glu Lys Thr Ser Glu Thr 70 75 Ala Ala Lys Gly Val Asn Thr Gly Gly Arg Glu Pro Asn Thr Met Val 85 90 Glu Lys Glu Arg Pro Leu Ala Asp Lys Lys Ala Gln Arg Pro Phe Glu 105 Arg Ser Asp Phe Ser Asp Ser Ile Lys Ile Gln Thr Pro Glu Leu Gly 120 Glu Val Phe Gln Asn Lys Asp Ser Asp Tyr Leu Lys Asn Asp Asn Pro 130 135 140 Glu Glu His Leu Lys Thr Ser Gly Leu Ala Gly Glu Pro Glu Gly Glu 145 150 155 Leu Ser Lys Glu Asp His Glu Asn Thr Glu Lys Tyr Met Gly Thr Glu 165 170 . Ser Gln Gly Ser Ala Ala Ala Glu Pro Glu Asp Asp Ser Phe His Trp 180 185 Thr Pro His Thr Ser Val Glu Pro Gly His Ser Asp Lys Arg Glu Asp 200 Leu Leu Ile Ile Ser Ser Phe Phe Lys Glu Gln Gln Ser Leu Gln Arg 215 Phe Gln Lys Tyr Phe Asn Val His Glu Leu Glu Ala Leu Leu Gln Glu 230 235 240 Met Ser Ser Lys Leu Lys Ser Ala Gln Gln Glu Ser Leu Pro Tyr Asn 250 255 Met Glu Lys Val Leu Asp Lys Val Phe Arg Ala Ser Glu Ser Gln Ile 265 Leu Ser Ile Ala Glu Lys Met Leu Asp Thr Arg Val Ala Glu Asn Arg 280 Asp Leu Gly Met Asn Glu Asn Asn Ile Phe Glu Glu Ala Ala Val Leu 295 300 Asp Asp Ile Gln Asp Leu Ile Tyr Phe Val Arg Tyr Lys His Ser Thr 315 320 Ala Glu Glu Thr Ala Thr Leu Val Met Ala Pro Pro Leu Glu Glu Gly 325 330 Leu Gly Gly Ala Met Glu Glu Met Gln Pro Leu His Glu Asp Asn Phe 345 Ser Arg Glu Lys Thr Ala Glu Leu Asn Val Gln Val Pro Glu Glu Pro 360 Thr His Leu Asp Gln Arg Val Ile Gly Asp Thr His Ala Ser Glu Val

Con	370	T	Desc	7	mb	375		7		3	380			**- 1	m1
385			Pro		390					395		_			400
Thr	Glu	Asp	Thr	Pro 405		Asp	Ala	Ile	Asp 410		Asn	Lys	Gln	Pro 415	
Thr	Ala	Ala	Glu 420		Pro	Ala	Ser	Val 425		Pro	Leu	Glu	Asn 430		Ile
Leu	Leu	Ile 435	Tyr	Ser	Phe	Met	Phe	Tyr		Thr	Lys	Ser	Leu		Ala
Thr	Leu 450	_	Asp	Asp	Val		Pro		Pro	Asp		Tyr		Leu	Pro
	Lys	Pro	Val	Phe		455 Thr		Phe	Leu	_			Ser	Phe	
465 Ile		Leu	Trp	Arg	470 Thr	Val	Leu	Val		475 Lys		Arg	Val	_	
Val	Thr	Glu	Gln		Ile	Ser	Glu			Lys	Thr	Ile			
Asn	Thr		500 Leu	Val	Gln	Lys		505 Ser		Tyr	Glu		510 Lys		Lys
Glu	Ser 530	515 Lys	Lys	His	Val			Thr	Arg	Lys		525 Asn	Met	Ile	Leu
Ser 545	Asp	Glu	Ala	Ile	Lys 550	535 Tyr		Asp	Lys		540 Lys	Thr	Leu	Glu	_
		Glu	Ile	Leu 565		Asp	Thr	Ala		555 Asn	Leu	Arg	Val		560 Leu
Glu	Ser	Glu	Arg 580		Gln	Asn	Val	Lys 585	570 Asn	Gln	Asp	Leu	Ile 590	575 Ser	Glu
Asn	Lys	Lys 595	Ser	Ile	Glu	Lys	Leu 600		Asp	Val	Ile	Ser 605		Asn	Ala
Ser	Glu 610		Ser	Glu	Val	Gln 615		Ala	Leu	Asn	Glu 620	_	Lys	Leu	Ser
Glu 625		Lys	Val	Lys	Ser 630		Cys	His	Arg	Val 635		Glu	Glu	Asn	Ala 640
	Ļeu	Lys	Lys	Lys 645		Glu	Gln	Leu	Gln 650		Glu	Ile	Glu	Asp 655	
Ser	Lys	Leu	His 660	-	Glu	Leu	Ser	Glu 665		Ile	Lys	Ser	Phe 670		Lys
Ser	Gln	Lys 675	Asp	Leu	Glu	Val	Ala 680		Thr	His	Lys	Asp 685		Asn	Ile
Asn	Ala 690		Thr	Asn	Cys	Ile 695		Gln	Leu	Asn	Leu 700		Glu	Cys	Glu
Ser 705		Ser	Glu		Gln 710	Asn		Gly		Asn 715	Asp	Ser	Asp	Glu	Leu 720
	Asn	Gly	Glu					Arg				Met	Lys	Asn 735	
Ile	Lys	Gln	Met 740		Asp	Val	Ser	Arg 745		Gln	Thr	Ala	Ile 750		Val
Val	Glu	Glu 755	Asp	Leu	Lys	Leu	Leu 760		Leu	Lys	Leu	Arg 765		Ser	Val
Ser	Thr 770		Cys	Asn	Leu	Glu 775		Gln	Val	Lys	Lys 780		Glu	Asp	Asp
Arg 785	Asn	Ser	Leu	Gln	Ala 790		Lys	Ala	Gly	Leu 795		Asp	Glu	Cys	Lys 800
Thr	Leu	Arg	Gln	Lys 805		Glu	Ile	Leu	Asn 810		Leu	Tyr	Gln	Gln 815	
Glu	Met	Ala	Leu 820		Lys	Lys	Leu	Ser 825		Glu	Glu	Tyr	Glu 830		Gln
Glu	Arg	Glu 835	His	Arg	Leu	Ser	Ala 840		Asp	Glu	Lys	Ala 845		Ser	Ala
Ala	Glu 850		Val	Lys	Thr	Tyr 855		Arg	Arg	Ile	Glu 860		Met	Glu	Asp
Glu 865	Leu	Gln	Lys	Thr	Glu 870		Ser	Phe	Lys	Asn 875		Ile	Ala	Thr	His 880
Glu	Lys	Lys	Ala	His		Asn	Trp	Leu	Lys		Arg	Ala	Ala	Glu	

890 Ala Ile Ala Glu Glu Lys Arg Glu Ala Ala Asn Leu Arg His Lys Leu 905 Leu Asp Leu Thr Gln Lys Met Ala Met Leu Gln Glu Glu Pro Val Ile 920 Val Lys Pro Met Pro Gly Lys Pro Asn Thr Gln Asn Pro Pro Arg Arg 930 935 940 Gly Pro Leu Ser Gln Asn Gly Ser Phe Gly Pro Ser Pro Val Ser Gly 950 955 Gly Glu Cys Ser Pro Pro Leu Thr Val Glu Pro Pro Val Arg Pro Leu 965 970 Ser Ala Thr Leu Asn Arg Arg Asp Met Pro Arg Ser Glu Phe Gly Ser 980 985 Leu Asp Gly Pro Leu Pro His Pro Arg Trp Ser Ala Glu Ala Ser Gly 995 1000 1005 Lys Pro Ser Pro Ser Asp Pro Gly Ser Gly Thr Ala Thr Met Met Asn 1010 1015 1020 Ser Ser Ser Arg Gly Ser Ser Pro Thr Arg Val Leu Asp Glu Gly Lys 1025 1030 1035 Val Asn Met Ala Pro Lys Gly Pro Pro Pro Phe Pro Gly Val Pro Leu 1045 1050 1055 Met Ser Thr Pro Met Gly Gly Pro Val Pro Pro Pro Ile Arg Tyr Gly 1060 1065 1070 Pro Pro Pro Gln Leu Cys Gly Pro Phe Gly Pro Arg Pro Leu Pro Pro 1075 1080 1085 Pro Phe Gly Pro Gly Met Arg Pro Pro Leu Gly Leu Arg Glu Phe Ala 1095 1100 Pro Gly Val Pro Pro Gly Arg Arg Asp Leu Pro Leu His Pro Arg Gly 1110 1115 Phe Leu Pro Gly His Ala Pro Phe Arg Pro Leu Gly Ser Leu Gly Pro . 1125 1130 1135 Arg Glu Tyr Phe Ile Pro Gly Thr Arg Leu Pro Pro Pro Thr His Gly 1140 1145 1150 Pro Gln Glu Tyr Pro Pro Pro Pro Ala Val Arg Asp Leu Leu Pro Ser 1155 1160 1165 Gly Ser Arg Asp Glu Pro Pro Pro Ala Ser Gln Ser Thr Ser Gln Asp 1170 1175 Cys Ser Gln Ala Leu Lys Gln Ser Pro 1190 1193

<210> 1118 <211> 981 <212>Amino acid <213> Homo sapiens

<400> 1118

 Met
 Ala
 Ala
 Asp
 Ser
 Glu
 Pro
 Glu
 Ser
 Glu
 Val
 Phe
 Glu
 Ile
 Thr
 Asp
 15

 Phe
 Thr
 Thr
 Ala
 Ser
 Glu
 Trp
 Glu
 Arg
 Phe
 Ile
 Ser
 Lys
 Val
 Glu
 Glu
 Glu
 Glu
 Glu
 Glu
 Glu
 Glu
 Lys
 Pro
 Leu

 Glu
 Lys
 Gly
 Ile
 Phe
 Thr
 Ser
 Gly
 Thr
 Trp
 Glu
 Glu
 Lys
 Ser
 Asp
 Glu

 Glu
 Lys
 Gly
 Ile
 Phe
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 Gly
 Thr
 Trp
 Glu
 Glu
 Lys
 Ser
 Asp
 Glu

 Ile
 Ser
 Phe
 Ala
 Asp
 Phe
 Lys
 Phe
 Ser
 Val
 Thr
 His
 Tyr
 Leu
 Val
 Fer
 Fe

			7.00												
Pro	Ara	Ala	100 His		Leu	Val	Ara	105 Trn		์ Glv	Len	Ara	110 Glu		Val
		115					120					125			
	130	•				135					140				Lys
Cys 145		Leu	Leu	Leu	Ser 150		Val	Ser	Ile	Ala 155		Gly	Asn	Thr	Gly 160
Cys	Gln	Val	Pro	Leu 165	Phe	Val	Gln	Ile	His		Lys	Trp	Arg	Arg 175	
Tyr	Val	Gly	Glu 180		Gln	Gly	Pro	Gly 185	Val		Thr	Asp	Phe	Glu	
Val	His	Leu 195		Lys	Val	Pro	Asn 200	Gln		Thr	His	Leu 205	Ser		Leu
Leu	Asp 210			Lys	Ser	Lys 215	Ile		Cys	Pro	Leu 220			Leu	Pro
Pro 225		Ser	Ile	Ala	Ile 230	Arg	Phe	Thr	Tyr	Val 235	Leu	Gln	Asp	Trp	Gln 240
		Phe	Trp	Pro 245		Gln	Pro	Pro	Asp 250	Ile		Ala	Leu	Val 255	Gly
Gly	Glu	Val	Gly 260		Leu	Glu	Phe	Gly 265	Lys		Pro	Phe	Gly 270		Cys
Glu	Asp	Pro 275	Ile	Ser	Glu	Leu	His 280			Thr	Thr	Trp 285		His	Leu
Thr	Glu 290	Gly	Ile	Ile	Val	Asp 295		Asp	Val	Tyr	Ser 300		Leu	Asp	Pro
Ile 305		Ala	Pro	His	Trp 310	Ser	Val	Arg	Val	Arg 315	Lys	Ala	Glu	Asn	Pro 320
Gln	Cys	Leu	Leu	Gly 325	Asp	Phe	Val	Thr	Glu 330		Phe	Lys	Ile	Cys 335	Arg
Arg	Lys	Glu	Ser 340	Thr	Asp	Glu	Ile	Leu 345	Gly	Arg	Ser	Ala	Phe 350	Glu	Glu
Glu	Gly	Lys 355	Glu	Thr	Ala	Asp	Ile 360	Thr	His	Ala	Leu	Ser 365	Lys	Leu	Thr
Glu	Pro 370	Ala	Ser	Val	Pro	Ile 375	His	Lys	Leu	Ser	Val 380	Ser	Asn	Met	Val
His 385	Thr	Ala	Lys	Lys	Lys 390	Ile	Arg	Lys	His	Arg 395	Gly	Val	Glu	Glu	Ser 400
Pro	Leu	Asn	Asn	Asp 405	Val	Leu	Asn	Thr	Ile 410	Leu	Leu	Phe	Leu	Phe 415	Pro
Asp	Ala	Val	Ser 420	Glu	Lys	Pro	Leu	Asp 425	Gly	Thr	Thr	Ser	Thr 430	Asp	Asn
Asn	Asn	Pro 435	Pro	Ser	Glu	Ser	Glu 440	Asp	Tyr	Asn	Leu	Tyr 445	Asn	Gln	Phe
Lys	Ser 450	Ala	Pro	Ser	Asp	Ser 455	Leu	Thr	Tyr	Lys	Leu 460	Ala	Leu	Cys	Leu
Cys 465	Met	Ile	Asn	Phe	Tyr 470	His	Gly	Gly	Leu	Lys 475	Gly	Val	Ala	His	Leu 480
Trp.	Gln	Glu	Phe	Val 485	Leu	Glu	Met	Arg	Phe 490	Arg	Trp	Glu	Asn	Asn 495	Phe
Leu	Ile	Pro	Gly 500	Leu	Ala	Ser	Gly	Pro 505	Pro	Asp	Leu	Arg	Cys 510	Cys	Leu
Leu	His	Gln 515	Lys	Leu	Gln	Met	Leu 520	Asn	Cys	Cys	Ile	Glu 525	Arg	Lys	Lys
Ala	Arg 530	Asp	Glu	Gly	Lys	Lys 535	Thr	Ser	Ala	Ser	Asp 540	Val	Thr	Asn	Ile
Tyr 545	Pro	Gly	Asp	Ala	Gly 550	Lys	Ala	Gly	Asp	Gln 555	Leu	Val	Pro	Asp	Asn 560
Leu	Lys	Glu	Thr	Asp 565	Lys	Glu	Lys	Gly	Glu 570		Gly	Lys	Ser	Trp 575	
Ser	Trp	Ser	Asp 580	Ser	Glu	Glu	Glu	Phe 585		Glu	Cys	Leu	Ser 590		Thr
Glu	Glu	Leu 595	Lys	Gly	Asn	Gly	Gln 600		Ser	Gly	Lys	Lys 605		Gly	Pro
Lys	Glu	Met	Ala	Asn	Leu	Arg		Glu	Gly	Arg	Leu		Gln	His	Gly

610 615 620 Lys Leu Thr Leu Leu His Asn Gly Glu Pro Leu Tyr Ile Pro Val Thr 630 635 Gln Glu Pro Ala Pro Met Thr Glu Asp Leu Leu Glu Glu Gln Ser Glu 645 650 Val Leu Ala Lys Leu Gly Thr Ser Ala Glu Gly Ala His Leu Arg Ala 660 665 Arg Met Gln Ser Ala Cys Leu Leu Ser Asp Met Glu Ser Phe Lys Ala . 680 Ala Asn Pro Gly Cys Ser Leu Glu Asp Phe Val Arg Trp Tyr Ser Pro 695 700 Arg Asp Tyr Ile Glu Glu Glu Val Ile Asp Glu Lys Gly Asn Val Val 710 715 Leu Lys Gly Glu Leu Ser Ala Arg Met Lys Ile Pro Ser Asn Met Trp 725 730 Val Glu Ala Trp Glu Thr Ala Lys Pro Ile Pro Ala Arg Arg Gln Arg 740 745 Arg Leu Phe Asp Asp Thr Arg Glu Ala Glu Lys Val Leu His Tyr Leu 760 Ala Ile Gln Lys Pro Ala Asp Leu Ala Arg His Leu Leu Pro Cys Val 775 780 Ile His Ala Ala Val Leu Lys Val Lys Glu Glu Glu Ser Leu Glu Asn 790 795 Ile Ser Ser Val Lys Lys Ile Ile Lys Gln Ile Ile Ser His Ser Ser 805 810 Lys Val Leu His Phe Pro Asn Pro Glu Asp Lys Lys Leu Glu Glu Ile 825 Ile His Gln Ile Thr Asn Val Glu Ala Leu Ile Ala Arg Ala Arg Ser 840 845 Leu Lys Ala Lys Phe Gly Thr Glu Lys Cys Glu Gln Glu Glu Glu Lys 855 860 Glu Asp Leu Glu Arg Phe Val Ser Cys Leu Leu Glu Gln Pro Glu Val 870 875 Leu Val Thr Gly Ala Gly Arg Gly His Ala Gly Arg Ile Ile His Lys 885 890 Leu Phe Val Asn Ala Gln Arg Ala Ala Ala Met Thr Pro Pro Glu Glu 905 Glu Leu Lys Arg Met Gly Ser Pro Glu Glu Arg Arg Gln Asn Ser Val 920 Ser Asp Phe Pro Pro Pro Ala Gly Arg Glu Phe Ile Leu Arg Thr Thr 935 940 Val Pro Arg Pro Ala Pro Tyr Ser Lys Ala Leu Pro Gln Arg Met Tyr 950 955 Ser Val Leu Thr Lys Glu Asp Phe Arg Leu Ala Gly Ala Phe Ser Ser 965 970 Asp Thr Ser Phe Phe 980 981

<210> 1119 <211> 554 <212>Amino acid <213> Homo sapiens

<400> 1119

 Ser Pro Thr Arg
 Thr Gly Asp Arg
 Ser Val Ser Leu Ile Val Phe Leu
 Leu 15

 Thr Glu Gly Lys
 Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile Leu
 20
 25
 30

 Asn Asn Thr Arg
 Glu Ala Ala Arg
 Gly Gln Val Cys
 Ile Phe Thr Ile

40 Gly Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys Leu Ser Leu 55 Glu Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu Asp Ala Gly Ser Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr Pro Leu Leu Ser 90 Asp Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val Val Gln Ala Thr Lys 100 105 Thr Leu Phe Pro Asn Tyr Phe Asn Gly Ser Glu Ile Ile Ile Ala Gly 120 Lys Leu Val Asp Arg Lys Leu Asp His Leu His Val Glu Val Thr Ala 135 140 Ser Asn Ser Lys Lys Phe Ile Ile Leu Lys Thr Asp Val Pro Val Arg 150 155 Pro Gln Lys Ala Gly Lys Asp Val Thr Gly Ser Pro Arg Pro Gly Gly 165 170 Asp Gly Glu Gly Asp Thr Asn His Ile Glu Arg Leu Trp Ser Tyr Leu 180 185 Thr Thr Lys Glu Leu Leu Ser Ser Trp Leu Gln Ser Asp Asp Glu Pro 200 Glu Lys Glu Arg Leu Arg Gln Arg Ala Gln Ala Leu Ala Val Ser Tyr 215 Arg Phe Leu Thr Pro Phe Thr Ser Met Lys Leu Arg Gly Pro Val Pro 230 235 Arg Met Asp Gly Leu Glu Glu Ala His Gly Met Ser Ala Ala Met Gly 245 250 Pro Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr Gln Pro Gly . 260 265 Pro Leu Leu Lys Lys Pro Tyr Gln Pro Arg Ile Lys Ile Ser Lys Thr 280 Ser Val Asp Gly Asp Pro His Phe Val Val Asp Phe Pro Leu Ser Arg 295 Leu Thr Val Cys Phe Asn Ile Asp Gly Gln Pro Gly Asp Ile Leu Arg 315 310 Leu Val Ser Asp His Arg Asp Ser Gly Val Thr Val Asn Gly Glu Leu 325 330 Ile Gly Ala Pro Ala Pro Pro Asn Gly His Lys Lys Gln Arg Thr Tyr 345 Leu Arg Thr Ile Thr Ile Leu Ile Asn Lys Pro Glu Arg Ser Tyr Leu 360 Glu Ile Thr Pro Ser Arg Val Ile Leu Asp Gly Gly Asp Arg Leu Val Leu Pro Cys Asn Gln Ser Val Val Gly Ser Trp Gly Leu Glu Val 390 395 Ser Val Ser Ala Asn Ala Asn Val Thr Val Thr Ile Gln Gly Ser Ile 405 410 Ala Phe Val Ile Leu Ile His Leu Tyr Lys Lys Pro Ala Pro Phe Gln 425 Arg His His Leu Gly Phe Tyr Ile Ala Asn Ser Glu Gly Leu Ser Ser 440 Asn Cys His Gly Leu Leu Gly Gln Phe Leu Asn Gln Asp Ala Arg Leu 455 460 Thr Glu Asp Pro Ala Gly Pro Ser Gln Asn Leu Thr His Pro Leu Leu 470 475 Leu Gln Val Gly Glu Gly Pro Glu Ala Val Leu Thr Val Lys Gly His 485 490 Gln Val Pro Val Val Trp Lys Gln Arg Lys Ile Tyr Asn Gly Glu Glu 505 Gln Ile Asp Cys Trp Phe Ala Arg Asn Asn Ala Ala Lys Leu Ile Asp 520 Gly Glu Tyr Lys Asp Tyr Leu Ala Ser His Pro Phe Asp Thr Gly Met 535 Thr Leu Gly Gln Gly Met Ser Arg Glu Leu

545 550 554

<210> 1120 <211> 107 <212>Amino acid <213> Homo sapiens

<210> 1121 <211> 1241 <212>Amino acid <213> Homo sapiens

<400> 1121 Pro Ala Ala Pro Glu His Thr Asp Pro Ser Glu Pro Arg Gly Ser Val 1 5 10 Ser Cys Cys Ser Leu Leu Arg Gly Leu Ser Ser Gly Trp Ser Ser Pro 20 Leu Leu Pro Ala Pro Val Cys Asn Pro Asn Lys Ala Ile Phe Thr Val 40 Asp Ala Lys Thr Thr Glu Ile Leu Val Ala Asn Asp Lys Ala Cys Gly · 55 Leu Leu Gly Tyr Ser Ser Gln Asp Leu Ile Gly Gln Lys Leu Thr Gln 70 75 Phe Phe Leu Arg Ser Asp Ser Asp Val Val Glu Ala Leu Ser Glu Glu 85 90 His Met Glu Ala Asp Gly His Ala Ala Val Val Phe Gly Thr Val Val 105 Asp Ile Ile Ser Arg Ser Gly Glu Lys Ile Pro Val Ser Val Trp Met 125 120 Lys Arg Met Arg Gln Glu Arg Arg Leu Cys Cys Val Val Val Leu Glu 135 140 Pro Val Glu Arg Val Ser Thr Trp Val Ala Phe Gln Ser Asp Gly Thr 150 155 160 Val Thr Ser Cys Asp Ser Leu Phe Ala His Leu His Gly Tyr Val Ser 165 170 175 Gly Glu Asp Val Ala Gly Gln His Ile Thr Asp Leu Ile Pro Ser Val 185 Gln Leu Pro Pro Ser Gly Gln His Ile Pro Lys Asn Leu Lys Ile Gln

		195					200					205			
Arg	Ser 210	Val	Gly	Arg	Ala	Arg 215		Gly	Thr	Thr	Phe 220		Leu	ser	Leu
Lys 225		Lys	Ser	Gln	Pro 230	Ser		Glu	Glu	Ala 235	Thr		Gly	Glu	Ala 240
		Val	Ser	Gly 245	Tyr		Ala	Ser	Val	Trp		Phe	Cys		Ile
Ser	Gly	Leu	1le 260	Thr		Leu	Pro	Asp	Gly		Ile	His			
His	Ser	Phe	Ala	Leu	Thr	Leu		Gly		Gly	Lys				Leu
Gly		Asn		Thr	Phe		280 Ile		Gly	Phe				Met	Asp
			Asn	Ser			Gln	Leu	. Pro		300 Leu		Ser	Cys	Leu
305 Asp		Gly	Asn	Glu 325	310 Ser		Cys	Gly			Thr	Leu	Asp		_
Gln	Gly	Gln		Pro	Ala	Glu	Gly				Pro	Arg		335 Asn	
Val	Leu			Gly	His	Val		345 Pro		Asp	Glu			Lys	Leu
Met	Glu 370			Asp	Ile			Gly	Thr	Gln		365 Glu		Ile	Ala
Gly 385	Gly		Leu	Leu	Ser 390	375 Cys		Ser	Pro		380 Pro	Ala	Pro	Gly	Val
		Val	Pro	Glu		Ser	Leu	Pro	Val	395 His	Glv	Glu	Gl n	λla	400
				405					410					415	
			420	Gln				425					430		
		435		Gly			440					445			
	450			Pro		455					460				
Pro 465	Ala	Glu	Asp	Gly	Gly 470	Ser	Asp	Ala	Gly	Met 475	Cys	Gly	Leu	Cys	Gln 480
Lys	Ala	Gln	Leu	Glu 485	Arg	Met	Gly	Val	Ser 490	Gly	Pro	ser	Gly	Ser 495	Asp
Leu	Trp	Ala	Gly 500	Ala	Ala	Val	Ala	Lys 505	Pro	Gln	Ala	Lys	Gly 510	Gln	Leu
Ala	Gly	Gly 515	Ser	Leu	Leu	Met	His 520	Cys	Pro	Cys	Tyr	Gly 525	Ser	Glu	Trp
Gly	Leu 530		Trp	Arg		Gln 535		Leu	Ala		Ser 540		Ser	Gly	Met
Ala 545	Gly	Leu	Ser	Phe	Gly 550	Thr	Pro	Thr	Leu	Asp 555	Glu	Pro	Trp	Leu	Gly 560
Val	Glu	Asn	Asp	Arg 565	Glu	Glu	Leu	Gln	Thr 570	Cys	Leu		Lys	Glu 575	Gln
Leu	Ser	Gln	Leu 580	Ser	Leu	Ala	Gly	Ala 585	Leu	Asp	Val	Pro	His 590	Ala	Glu
Leu	Val	Pro 595	Thr	Glu	Cys	Gln	Ala 600	Val	Thr	Ala	Pro	Val 605	Ser	Ser	Cys
Asp	Leu 610	Gly	Gly	Arg	Asp	Leu 615	Cys	Gly	Gly	Cys	Thr 620	Gly	Ser	Ser	Ser
Ala 625	Cys	Tyr	Ala	Leu	Ala 630	Thr	Asp	Leu	Pro	Gly 635	Gly	Leu	Glu	Ala	Val 640
Glu	Ala	Gln	Glu	Val 645	Asp	Val	Asn	Ser	Phe 650		Trp	Asn	Leu	Lys 655	
Leu	Phe	Phe	Ser 660	Asp	Gln	Thr	Asp	Gln 665		Ser	Ser	Asn	Cys 670		Cys
Ala	Thr	Ser 675	Glu	Leu	Arg	Glu	Thr 680		Ser	Ser	Leu	Ala 685		Gly	Ser
	690			Gly		695	Gln				700	Cys			
Asp	Arg	Glu	Leu	Leu	Leu		Thr	Gly	Thr	Cys		Asp	Leu	Gly	Gln

Gly Arg Arg Phe Arg Glu Ser Cys Val Gly His Asp Pro Thr Glu Pro Leu Glu Val Cys Leu Val Ser Ser Glu His Tyr Ala Ala Ser Asp Arg Glu Ser Pro Gly His Val Pro Ser Thr Leu Asp Ala Gly Pro Glu Asp Thr Cys Pro Ser Ala Glu Glu Pro Arg Leu Asn Val Gln Val Thr Ser Thr Pro Val Ile Val Met Arg Gly Ala Ala Gly Leu Gln Arg Glu Ile Gln Glu Gly Ala Tyr Ser Gly Ser Cys Tyr His Arg Asp Gly Leu Arg Leu Ser Ile Gln Phe Glu Val Arg Arg Val Glu Leu Gln Gly Pro Thr Pro Leu Phe Cys Cys Trp Leu Val Lys Asp Leu Leu His Ser Gln Arg Asp Ser Ala Ala Arg Thr Arg Leu Phe Leu Ala Ser Leu Pro Gly Ser Thr His Ser Thr Ala Ala Glu Leu Thr Gly Pro Ser Leu Val Glu Val Leu Arg Ala Arg Pro Trp Phe Glu Glu Pro Pro Lys Ala Val Glu Leu Glu Gly Leu Ala Ala Cys Glu Gly Glu Tyr Ser Gln Lys Tyr Ser Thr Met Ser Pro Leu Gly Ser Gly Ala Phe Gly Phe Val Trp Thr Ala Val Asp Lys Glu Lys Asn Lys Glu Val Val Val Lys Phe Ile Lys Lys Glu Lys Val Leu Glu Asp Cys Trp Ile Glu Asp Pro Lys Leu Gly Lys Val Thr Leu Glu Ile Ala Ile Leu Ser Arg Val Glu His Ala Asn Ile Ile Lys Val Leu Asp Ile Phe Glu Asn Gln Gly Phe Phe Gln Leu Val Met Glu Lys His Gly Ser Gly Leu Asp Leu Phe Ala Phe Ile Asp Arg His Pro Arg Leu Asp Glu Pro Leu Ala Ser Tyr Ile Phe Arg Gln Val Arg 1010 1015 Ala Gly Gln Ser Arg Leu Val Ser Ala Val Gly Tyr Leu Arg Leu Lys 1030 1035 Asp Ile Ile His Arg Asp Ile Lys Asp Glu Asn Ile Val Ile Ala Glu Asp Phe Thr Ile Lys Leu Ile Asp Phe Gly Ser Ala Ala Tyr Leu Glu Arg Gly Lys Leu Phe Tyr Thr Phe Cys Gly Thr Ile Glu Tyr Cys Ala Pro Glu Val Leu Met Gly Asn Pro Tyr Arg Gly Pro Glu Leu Glu Met Trp Ser Leu Gly Val Thr Leu Tyr Thr Leu Val Phe Glu Glu Asn Pro Phe Cys Glu Leu Glu Glu Thr Val Glu Ala Ala Ile His Pro Pro Tyr Leu Val Ser Lys Glu Leu Met Ser Leu Val Ser Gly Leu Leu Gln Pro Val Pro Glu Arg Arg Thr Thr Leu Glu Lys Leu Val Thr Asp Pro Trp Val Thr Gln Pro Val Asn Leu Ala Asp Tyr Thr Trp Glu Glu Val Phe Arg Val Asn Lys Pro Glu Ser Gly Val Leu Ser Ala Ala Ser Leu Glu Met Gly Asn Arg Ser Leu Ser Asp Val Ala Gln Ala Gln Glu Leu Cys Gly Gly Pro Val Pro Gly Glu Ala Pro Asn Gly Gln Gly Cys Leu His

1220 1225 Pro Gly Asp Pro Arg Leu Leu Thr Ser 1235 12401241

er

1230

<210> 1122 <211> 395 <212>Amino acid <213> Homo sapiens

<400> 1122 Pro Gly Thr Ser Ala Ala Thr Cys Arg Phe Leu Ser Pro Pro Val Ile 10 Ser Leu Ser Phe Thr Gly Leu Cys Ile Ser Asp Leu Val Val Ala Val 25 Asn Gly Val Trp Ile Leu Val Glu Thr Phe Met Leu Lys Gly Gly Asn 40 Phe Phe Ser Lys His Val Pro Trp Ser Tyr Leu Val Phe Leu Thr Ile Tyr Gly Val Glu Leu Phe Leu Lys Val Ala Gly Leu Gly Pro Val Glu Tyr Leu Ser Ser Gly Trp Asn Leu Phe Asp Phe Ser Val Thr Val Phe 85 90 Ala Phe Leu Gly Leu Leu Ala Leu Ala Leu Asn Met Glu Pro Phe Tyr 100 105 110 Phe Ile Val Val Leu Arg Pro Leu Gln Leu Leu Arg Leu Phe Lys Leu 115 120 125 Lys Glu Arg Tyr Arg Asn Val Leu Asp Thr Met Phe Glu Leu Leu Pro 135 140 Arg Met Ala Ser Leu Gly Leu Thr Leu Leu Ile Phe Tyr Tyr Ser Phe 145 150 155 160 Ala Ile Val Gly Met Glu Phe Phe Cys Gly Ile Val Phe Pro Asn Cys 165 170 175 Cys Asn Thr Ser Thr Val Ala Asp Ala Tyr Arg Trp Arg Asn His Thr 185 Val Gly Asn Arg Thr Val Val Glu Glu Gly Tyr Tyr Tyr Leu Asn Asn 200 205 Phe Asp Asn Ile Leu Asn Ser Phe Val Thr Leu Phe Glu Leu Thr Val 215 220 Val Asn Asn Trp Tyr Ile Ile Met Glu Gly Val Thr Ser Gln Thr Ser 225 230 235 His Trp Ser Arg Leu Tyr Phe Met Thr Phe Tyr Ile Val Thr Met Val 245 250 Val Met Thr Ile Ile Val Ala Phe Ile Leu Glu Ala Phe Val Phe Arg 260 265 270 Met Asn Tyr Ser Arg Lys Asn Gln Asp Ser Glu Val Asp Gly Gly Ile 275 280 Thr Leu Glu Lys Glu Ile Ser Lys Glu Glu Leu Val Ala Val Leu Glu 295 300 Leu Tyr Arg Glu Ala Arg Gly Ala Ser Ser Asp Val Thr Arg Leu Leu 310 315 320 Glu Thro Leu Ser Gln Met Glu Arg Tyr Gln Gln His Ser Met Val Phe 330 335 Leu Gly Arg Arg Ser Arg Thr Lys Ser Asp Leu Ser Leu Lys Met Tyr 340 345 350 Gln Glu Glu Ile Gln Glu Trp Tyr Glu Glu His Ala Arg Glu Gln Glu 365 360 Gln Gln Arg Gln Leu Ser Ser Ser Ala Ala Pro Ala Ala Gln Gln Pro 375 380 Pro Gly Ser Arg Gln Arg Ser Gln Thr Val Thr

653

395

385 390

<210> 1123 <211> 328 <212>Amino acid <213> Homo sapiens

<400> 1123 Leu Ala Gly Val Gly Thr Gln Ala Pro Pro Arg Arg Pro Gly Gly Glu 10 Met Ala Ala Gly Gln Asn Gly His Glu Glu Trp Val Gly Ser Ala Tyr 20 Leu Phe Val Glu Ser Ser Leu Asp Lys Val Val Leu Ser Asp Ala Tyr Ala His Pro Gln Gln Lys Val Ala Val Tyr Arg Ala Leu Gln Ala Ala 55 Leu Ala Glu Ser Gly Gly Ser Pro Asp Val Leu Gln Met Leu Lys Ile 70 His Arg Ser Asp Pro Gln Leu Ile Val Gln Leu Arg Phe Cys Gly Arg 85 90 Gln Pro Cys Gly Arg Phe Leu Arg Ala Tyr Arg Glu Gly Ala Leu Arg 105 Ala Ala Leu Gln Arg Ser Leu Ala Ala Ala Leu Ala Gln His Ser Val 120 Pro Leu Gln Leu Asp Leu Arg Ala Gly Ala Glu Arg Leu Glu Ala Leu 135 140 Leu Ala Asp Glu Glu Arg Cys Leu Ser Cys Ile Leu Ala Gln Gln Pro 150 155 Asp Arg Leu Arg Asp Glu Glu Leu Ala Glu Leu Glu Asp Ala Leu Arg 170 Asn Leu Lys Cys Gly Ser Gly Ala Arg Gly Gly Asp Gly Glu Val Ala 180 185 Ser Ala Pro Leu Gln Pro Pro Val Pro Ser Leu Ser Glu Val Lys Pro 195 200 Pro Pro Pro Pro Pro Ala Gln Thr Phe Leu Phe Gln Gly Gln Pro 215 Val Val Asn Arg Pro Leu Ser Leu Lys Asp Gln Gln Thr Phe Ala Arg 230 235 Ser Val Gly Leu Lys Trp Arg Lys Val Gly Arg Ser Leu Gln Arg Gly 245 250 255 Cys Arg Ala Leu Arg Asp Pro Ala Leu Asp Ser Leu Ala Tyr Glu Tyr 265 270 Glu Arg Glu Gly Leu Tyr Glu Gln Ala Phe Gln Leu Leu Arg Arg Phe 280 Val Gln Ala Glu Gly Arg Arg Ala Thr Leu Gln Arg Leu Val Glu Ala 295 300 Leu Glu Glu Asn Glu Leu Thr Ser Leu Ala Glu Asp Leu Leu Gly Leu 310 315 Thr Asp Pro Asn Gly Gly Leu Ala 325

<210> 1124 <211> 667 <212>Amino acid <213> Homo sapiens <220>

<221> misc feature

<222> (1)...(667) <223> X = any amino acid or stop code

<400> 1124 Ser Ser Lys Pro Lys Leu Lys Lys Arg Phe Ser Leu Arg Ser Val Gly Arg Ser Val Arg Gly Ser Val Arg Gly Ile Leu Gln Trp Arg Gly Thr 25 Val Asp Pro Pro Ser Ser Ala Gly Pro Leu Glu Thr Ser Ser Gly Pro 40 Pro Val Leu Gly Gly Asn Ser Asn Ser Asn Ser Ser Gly Gly Ala Gly 55 Thr Val Gly Arg Gly Leu Val Ser Asp Gly Thr Ser Pro Gly Glu Arg 75 Trp Thr His Arg Phe Glu Arg Leu Arg Leu Ser Arg Gly Gly Ala 8.5 90. Leu Lys Asp Gly Ala Gly Met Val Gln Arg Glu Glu Leu Leu Ser Phe 100 105 Met Gly Ala Glu Glu Ala Ala Pro Asp Pro Ala Gly Val Gly Arg Gly 120 125 Gly Gly Val Ala Gly Pro Pro Ser Gly Gly Gly Gln Pro Gln Trp 135 140 Gln Lys Cys Arg Leu Leu Arg Ser Glu Gly Glu Gly Gly Gly 155 Ser Arg Leu Glu Phe Phe Val Pro Pro Lys Ala Ser Arg Pro Arg Leu 165 170 Ser Ile Pro Cys Ser Ser Ile Thr Asp Val Arg Thr Thr Thr Ala Leu 180 185 Glu Met Pro Asp Arg Glu Asn Thr Phe Val Val Lys Val Glu Gly Pro 200 Ser Glu Tyr Ile Met Glu Thr Val Asp Ala Gln His Val Lys Ala Trp 215 220 Val Ser Asp Ile Gln Glu Cys Leu Ser Pro Gly Pro Cys Pro Ala Thr 230 235 Ser Pro Arg Pro Met Thr Leu Pro Leu Ala Pro Gly Thr Ser Phe Leu 250 Thr Arg Glu Asn Thr Asp Ser Leu Glu Leu Ser Cys Leu Asn His Ser 265 Glu Ser Leu Pro Ser Gln Asp Leu Leu Gly Pro Ser Glu Ser Asn Asp Arg Leu Ser Gln Gly Ala Tyr Gly Gly Leu Ser Asp Arg Pro Ser 295 300 Ala Ser Ile Ser Pro Ser Ser Ala Ser Ile Ala Ala Ser His Phe Asp 310 315 Ser Met Glu Leu Leu Pro Pro Glu Leu Pro Pro Arg Ile Pro Ile Glu 325 330 Glu Gly Pro Pro Ala Gly Thr Val His Pro Leu Ser Ala Pro Tyr Pro 345 Pro Leu Asp Thr Pro Glu Thr Ala Thr Gly Ser Phe Leu Phe Gln Gly 360 Glu Pro Glu Gly Gly Glu Gly Asp Gln Pro Leu Ser Gly Tyr Pro Trp 375 380 Phe His Gly Met Leu Ser Arg Leu Lys Ala Ala Gln Leu Val Leu Thr 390 395 Gly Gly Thr Gly Ser His Gly Val Phe Leu Val Arg Gln Ser Glu Thr 410 Arg Arg Gly Glu Tyr Val Leu Thr Phe Asn Phe Gln Gly Lys Ala Lys 425 430 His Leu Arg Leu Ser Leu Asn Glu Glu Gly Gln Cys Arg Val Gln His 440 445

Leu Trp Phe Gln Ser Ile Phe Asp Met Leu Glu His Phe Arg Val His 455 Pro Ile Pro Leu Glu Ser Gly Gly Ser Ser Asp Val Val Leu Val Ser 470 475 Tyr Val Pro Ser Ser Gln Arg Gln Gln Gly Glu Gln Ser Arg Ser Ala 485 490 Gly Glu Glu Val Pro Val His Pro Arg Ser Glu Ala Gly Ser Arg Leu 500 505 Gly Ala Met Arg Gly Cys Ala Arg Glu Met Asp Ala Thr Pro Asn Ala 520 Ser Cys Thr Leu Met Pro Phe Gly Ala Ser Asp Cys Glu Pro Thr Thr 535 540 Ser His Asp Pro Pro Gln Pro Pro Glu Pro Pro Ser Trp Thr Asp Pro 550 555 Pro Gln Pro Gly Glu Glu Glu Ala Ser Arg Ala Pro Gly Ser; Gly Gly 565 570 Gln Gln Ala Ala Ala Ala Lys Glu Arg Gln Glu Lys Glu Lys Ala 580 585 Gly Gly Gly Val Pro Glu Glu Leu Val Pro Val Val Xaa Leu Val 595 600 605 Pro Val Gly Glu Leu Gly Glu Gly His Arg Pro Gln Ala Gln Glu Ala 615 620 Gln Gly Arg Leu Gly Pro Gly Gly Asp Ala Gly Val Pro Pro Met Val 630 635 Gln Leu Gln Gln Ser Pro Leu Gly Gly Asp Gly Glu Glu Gly His 645 650 Pro Arg Ala Ile Asn Asn Gln Tyr Ser Phe Val

<210> 1125 <211> 387 <212>Amino acid <213> Homo sapiens

Phe Arg Ala Pro Val Gly Thr Ala Ala Arg Ser Pro Gln Val Val Ile 10 Arg Arg Leu Pro Pro Gly Leu Thr Lys Glu Gln Leu Glu Glu Gln Leu Arg Pro Leu Pro Ala His Asp Tyr Phe Glu Phe Phe Ala Ala Asp Leu 40 Ser Leu Tyr Pro His Leu Tyr Ser Arg Ala Tyr Ile Asn Phe Arg Asn 55 Pro Asp Asp Ile Leu Leu Phe Arg Asp Arg Phe Asp Gly Tyr Ile Phe 70 Leu Asp Ser Lys Asp Pro Glu Tyr Lys Lys Phe Leu Glu Thr Tyr Cys 85 90 Val Glu Glu Lys Thr Ser Ala Asn Pro Glu Thr Leu Leu Gly Glu 105 Met Glu Ala Lys Thr Arg Glu Leu Ile Ala Arg Arg Thr Thr Pro Leu 120 125 Leu Glu Tyr Ile Lys Asn Arg Lys Leu Glu Lys Gln Arg Ile Arg Glu 135 140 Glu Lys Arg Glu Glu Arg Arg Arg Glu Leu Glu Lys Lys Arg Leu 150 155 Arg Glu Glu Glu Lys Arg Arg Arg Glu Glu Glu Arg Cys Lys 170 Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile 185

Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys 200 Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu 215 220 Ser Cys Ala Pro Gly Ala Val Lys Ala Arg Pro Met Glu Gly Ser 230 235 Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His 245 250 Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr 265 His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg 280 Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly 295 300 Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu 310 315 Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala 330 Pro Arg Lys Glu Arg Leu Ala Asn Lys Asp Arg Pro Ala Leu Gln Leu 345 Tyr Asp Pro Gly Ala Arg Phe Arg Ala Arg Glu Cys Gly Gly Asn Arg 360 Arg Ile Cys Lys Ala Glu Gly Ser Gly Thr Gly Pro Glu Lys Arg Glu 370 375 Glu Ala Glu 385 387

<210> 1126 <211> 208 <212>Amino acid <213> Homo sapiens

<400> 1126 Gly Val Trp Gly Val Cys Val Ser Gly Leu Leu Gln Val Gly Ser Gln 10 Arg Ala Gln Ala Trp Arg Ala Trp Ser Pro Met Glu Thr Pro Leu Thr 20 25 Gly Thr Phe Leu Trp Pro His Ile Pro Gln Gly Leu Phe Phe Asp Asp 40 Ser Tyr Gly Phe Tyr Pro Gly Gln Val Leu Ile Gly Pro Ala Lys Ile 55 60 Phe Ser Ser Val Gln Trp Leu Ser Gly Val Lys Pro Val Leu Ser Thr 70 75 Lys Ser Lys Phe Arg Val Val Val Glu Glu Val Gln Val Val Glu Leu 90 Lys Val Thr Trp Ile Thr Lys Ser Phe Cys Pro Gly Gly Thr Asp Ser 105 Val Ser Pro Pro Pro Ser Val Ile Thr Gln Glu Asn Leu Gly Arg Val 120 Lys Arg Leu Gly Cys Phe Asp His Ala Gln Arg His Ala Trp Gly Ala 135 Leu Ser Val Cys Leu Pro Ser Gln Gly Arg Ala Ser Gln Asp Cys Leu 155 Gly Met Ser Arg Lys Lys Leu Arg Pro Gly Gly Gly Leu Tyr Gly Gln 170 Glu Gly Glu Ala Pro Val Glu Glu Ala Gly Cys Ala Asp His Val Met 180 185 Leu Pro Arg His Pro Val Phe Pro Gly Pro Phe His Gly Arg Pro Arg 200 205

<210> 1127 <211> 670 <212>Amino acid <213> Homo sapiens

<400> 1127 Phe Arg Asp Ser Ser Pro Cys Ser Ala Phe Glu Phe His Cys Leu Ser Gly Glu Cys Ile His Ser Ser Trp Arg Cys Asp Gly Gly Pro Asp Cys 25 Lys Asp Lys Ser Asp Glu Glu Asn Cys Ala Val Ala Thr Cys Arg Pro 40 Asp Glu Phe Gln Cys Ser Asp Gly Asn Cys Ile His Gly Ser Arg Gln 55 Cys Asp Arg Glu Tyr Asp Cys Lys Asp Met Ser Asp Glu Val Gly Cys 70 75 Val Asn Val Thr Leu Cys Glu Gly Pro Asn Lys Phe Lys Cys His Ser 8.5 90 Gly Glu Cys Ile Thr Leu Asp Lys Val Cys Asn Met Ala Arg Asp Cys 105 Arg Asp Trp Ser Asp Glu Pro Ile Lys Glu Cys Gly Thr Asn Glu Cys 120 Leu Asp Asn Asn Gly Gly Cys Ser His Val Cys Asn Asp Leu Lys Ile 135 Gly Tyr Glu Cys Leu Cys Pro Asp Gly Phe Gln Leu Val Ala Gln Arg 150 155 Arg Cys Glu Asp Ile Asp Glu Cys Gln Asp Pro Asp Thr Cys Ser Gln 170 Leu Cys Val Asn Leu Glu Gly Gly Tyr Lys Cys Gln Cys Glu Glu Gly 180 185 Phe Gln Leu Asp Pro His Thr Lys Ala Cys Lys Ala Val Gly Ser Ile 200 Ala Tyr Leu Phe Phe Thr Asn Arg His Glu Val Arg Lys Met Thr Leu 215 220 Asp Arg Ser Glu Tyr Thr Ser Leu Ile Pro Asn Leu Arg Asn Val Val 230 235 Ala Leu Asp Thr Glu Val Ala Ser Asn Arg Ile Tyr Trp Ser Asp Leu 245 250 Ser Gln Arg Met Ile Cys Ser Thr Gln Leu Asp Arg Ala His Gly Val 265 Ser Ser Tyr Asp Thr Val Ile Ser Arg Asp Ile Gln Ala Pro Asp Gly 280 Leu Ala Val Asp Trp Ile His Ser Asn Ile Tyr Trp Thr Asp Ser Val 295 300 Leu Gly Thr Val Ser Val Ala Asp Thr Lys Gly Val Lys Arg Lys Thr 310 315 Leu Phe Arg Glu Asn Gly Ser Lys Pro Arg Ala Ile Val Val Asp Pro 325 330 Val His Gly Phe Met Tyr Trp Thr Asp Trp Gly Thr Pro Ala Lys Ile 345 Lys Lys Gly Gly Leu Asn Gly Val Asp Ile Tyr Ser Leu Val Thr Glu 355 360 Asn Ile Gln Trp Pro Asn Gly Ile Thr Leu Asp Leu Leu Ser Gly Arg 375 380 Leu Tyr Trp Val Asp Ser Lys Leu His Ser Ile Ser Ser Ile Asp Val 395

Asn Gly Gly Asn Arg Lys Thr Ile Leu Glu Asp Glu Lys Arg Leu Ala 405 410 His Pro Phe Ser Leu Ala Val Phe Glu Asp Lys Val Phe Trp Thr Asp 425 Ile Ile Asn Glu Ala Ile Phe Ser Ala Asn Arg Leu Thr Gly Ser Asp 440 Val Asn Leu Leu Ala Glu Asn Leu Leu Ser Pro Glu Asp Met Val Leu 455 Phe His Asn Leu Thr Gln Pro Arg Gly Val Asn Trp Cys Glu Arg Thr 470 475 Thr Leu Ser Asn Gly Gly Cys Gln Tyr Leu Cys Leu Pro Ala Pro Gln 485 490 Ile Asn Pro His Ser Pro Lys Phe Thr Cys Ala Cys Pro Asp Gly Met 505 Leu Leu Ala Arg Asp Met Arg Ser Cys Leu Thr Glu Gly Glu Ala Ala 520 525 Val Ala Thr Gln Glu Thr Ser Thr Val Arg Leu Lys Val Ser Ser Thr 535 540 Ala Val Arg Thr Gln His Thr Thr Arg Pro Val Pro Asp Thr Ser 550 555 Arg Leu Pro Gly Ala Thr Pro Gly Leu Thr Thr Val Glu Ile Val Thr 565 570 Met Ser His Gln Ala Leu Gly Asp Val Ala Gly Arg Gly Asn Glu Lys 585 Lys Pro Ser Ser Val Arg Ala Leu Ser Ile Val Leu Pro Ile Val Leu 600 Leu Val Phe Leu Cys Leu Gly Val Phe Leu Leu Trp Lys Asn Trp Arg 615 620 Leu Lys Asn Ile Asn Ser Ile Asn Phe Asp Asn Pro Val Tyr Gln Lys 630 635 Thr Thr Glu Asp Glu Val His Ile Cys His Asn Gln Asp Gly Tyr Ser 645 650 · Tyr Pro Ser Arg Gln Met Val Ser Leu Glu Asp Asp Val Ala 660 665

<210> 1128 <211> 383 <212>Amino acid <213> Homo sapiens

<400> 1128 Arg Ile Pro Gly Leu Gly Pro Pro Gly Ser Pro Pro Pro Pro Pro His Val Arg Gly Met Pro Gly Cys Pro Cys Pro Gly Cys Gly Met Ala Gly 20 25 Pro Arg Leu Leu Phe Leu Thr Ala Leu Ala Leu Glu Leu Leu Gly Arg 40 Ala Gly Gly Ser Gln Pro Ala Leu Arg Ser Arg Gly Thr Ala Thr Ala 55 Cys Arg Leu Asp Asn Lys Glu Ser Glu Ser Trp Gly Ala Leu Leu Ser 70 75 -Gly Glu Arg Leu Asp Thr Trp Ile Cys Ser Leu Leu Gly Ser Leu Met 85 90 Val Gly Leu Ser Gly Val Phe Pro Leu Leu Val Ile Pro Leu Glu Met 105 Gly Thr Met Leu Arg Ser Glu Ala Gly Ala Trp Arg Leu Lys Gln Leu 125 120 Leu Ser Phe Ala Leu Gly Gly Leu Leu Gly Asn Val Phe Leu His Leu

Leu Pro Glu Ala Trp Ala Tyr Thr Cys Ser Ala Ser Pro Gly Glu 150 155 Gly Gln Ser Leu Gln Gln Gln Gln Leu Gly Leu Trp Val Ile Ala 165 170 Gly Ile Leu Thr Phe Leu Ala Leu Glu Lys Met Phe Leu Asp Ser Lys 185 Glu Glu Gly Thr Ser Gln Ala Pro Asn Lys Asp Pro Thr Ala Ala Ala 200 Ala Ala Leu Asn Gly Gly His Cys Leu Ala Gln Pro Ala Ala Glu Pro . 215 Gly Leu Gly Ala Val Val Arg Ser Ile Lys Val Ser Gly Tyr Leu Asn 230 235 Leu Leu Ala Asn Thr Ile Asp Asn Phe Thr His Gly Leu Ala Val Ala 250 Ala Ser Phe Leu Val Ser Lys Lys Ile Gly Leu Leu Thr Thr Met Ala 265 Ile Leu Leu His Glu Ile Pro His Glu Val Gly Asp Phe Ala Ile Leu 280 Leu Arg Ala Gly Phe Asp Arg Trp Ser Ala Ala Lys Leu Gln Leu Ser 295 Thr Ala Leu Gly Gly Leu Leu Gly Ala Gly Phe Ala Ile Cys Thr Gln 310 315 Ser Pro Lys Gly Val Glu Glu Thr Ala Ala Trp Val Leu Pro Phe Thr 325 330 Ser Gly Gly Phe Leu Tyr Ile Ala Leu Val Asn Val Leu Pro Asp Leu 340 345 Leu Glu Glu Glu Asp Pro Trp Arg Ser Leu Gln Gln Leu Leu Leu Leu 360 365 Cys Ala Gly Ile Val Val Met Val Leu Phe Ser Leu Phe Val Asp 375 380

<210> 1129 <211> 174 <212>Amino acid <213> Homo sapiens

<400> 1129 Gly Lys Val Ser Ala Gly Gln Ala Gly Ala Asp Arg Thr Leu Arg Arg 10 Ala Pro Glu Pro Arg Phe Ser Gln Glu Pro Thr Gly Asn Ser Ala Tyr 25 Pro Gln Leu Arg Pro Phe Leu Asp Pro Gln Gly Arg Asp Leu Lys Pro 40 Ser Ala Leu Val Pro Pro Thr Arg Ser His Thr Gly Arg Arg Pro Trp 55 Leu His Thr Gln Pro Leu Pro Gly Pro Gln Gly Arg Ala Trp Gly Pro 70 Thr Cys Thr Pro Ala Cys Val Asp Arg Val Leu Glu Ser Glu Glu Gly 85 90 Arg Arg Glu Tyr Leu Ala Phe Pro Thr Ser Lys Ser Ser Gly Gln Lys 100 105 Gly Arg Lys Glu Leu Leu Lys Gly Asn Gly Arg Arg Ile Asp Tyr Met 115 120 Leu His Ala Glu Glu Gly Leu Cys Pro Asp Trp Lys Ala Glu Val Glu 135 Glu Phe Ser Phe Ile Thr Gln Leu Ser Gly Leu Thr Asp His Leu Pro 150 155 Val Ala Met Arg Leu Met Val Ser Ser Gly Glu Glu Ala 170

<210> 1130 <211> 231 <212>Amino acid <213> Homo sapiens

<400> 1130 Pro Cys Gly Gly Ile Arg Leu Ser Ala Ser Glu Ala Ala Thr Leu Phe 10 Gly Tyr Leu Val Val Pro Ala Gly Gly Gly Gly Thr Phe Leu Gly Gly 20 25 Phe Phe Val Asn Lys Leu Arg Leu Arg Gly Ser Ala Val Ile Lys Phe 40 Cys Leu Phe Cys Thr Val Val Ser Leu Leu Gly Ile Leu Val Phe Ser 55 Leu His Cys Pro Ser Val Pro Met Ala Gly Val Thr Ala Ser Tyr Gly 70 75 Gly Ser Leu Leu Pro Glu Gly His Leu Asn Leu Thr Ala Pro Cys Asn 85 Ala Ala Cys Ser Cys Gln Pro Glu His Tyr Ser Pro Val Cys Gly Ser 105 Asp Gly Leu Met Tyr Phe Ser Leu Cys His Ala Gly Cys Pro Ala Ala 120 Thr Glu Thr Asn Val Asp Gly Gln Lys Val Ser Gly Ala Ala Ala Tyr 135 140 Arg Pro Cys Pro Pro Leu Asp Pro Gly Lys Gly Pro Pro Cys Leu Pro 150 155 Leu Val Ile Gly Ala Ile Val Gly Leu Pro Arg Cys Thr Glu Thr Val 170 165 Ala Val Ser Leu Arg Ile Phe Pro Leu Val Leu Ala Met His Cys Arg 185 180 Glu Met His Phe Asn Leu Ser Glu Lys Ala Pro Pro Ser Gly Phe His 195 200 Ile Arg Cys Asn Phe Leu Tyr Ile Pro Gln Gln His Ser Cys Thr Asn 210 215 220 Gly Asn Ser Thr Met Cys Pro 230 231

<210> 1131 <211> 234 <212>Amino acid <213> Homo sapiens

Asp Glu Asn Leu Leu Val Asp Leu Arg Ser Gly Glu Leu Lys Leu Ile 90 Asp Phe Gly Ser Gly Ala Leu Leu Lys Asp Thr Val Tyr Thr Asp Phe 105 Asp Gly Thr Arg Val Tyr Ser Pro Pro Glu Trp Ile Arg Tyr His Arg 120 Tyr His Gly Arg Ser Ala Thr Val Trp Ser Leu Gly Val Leu Leu Tyr 135 Asp Met Val Cys Gly Asp Ile Pro Phe Glu Gln Asp Glu Glu Ile Leu 150 155 Arg Gly Arg Leu Leu Phe Arg Arg Val Ser Pro Glu Cys Gln Gln 170 Leu Ile Arg Trp Cys Leu Ser Leu Arg Pro Ser Glu Arg Pro Ser Leu 185 180 Asp Gln Ile Ala Ala His Pro Trp Met Leu Gly Ala Asp Gly Gly Ala 200 Pro Glu Ser Cys Asp Leu Arg Leu Cys Thr Leu Asp Pro Asp Asp Val 215 Ala Ser Thr Thr Ser Ser Ser Glu Ser Leu 230

<210> 1132 <211> 270 <212>Amino acid <213> Homo sapiens

<400> 1132 Gly Lys Asn Ser Gln Lys Ala Ser Pro Val Asp Asp Glu Gln Leu Ser 10 Val Cys Leu Ser Gly Phe Leu Asp Glu Val Met Lys Lys Tyr Gly Ser 25 Leu Val Pro Leu Ser Glu Lys Glu Val Leu Gly Arg Leu Lys Asp Val 40 Phe Asn Glu Asp Phe Ser Asn Arg Lys Pro Phe Ile Asn Arg Glu Ile 55 Thr Asn Tyr Arg Ala Arg His Gln Lys Cys Asn Phe Arg Ile Phe Tyr Asn Lys His Met Leu Asp Met Asp Asp Leu Ala Thr Leu Asp Gly Gln 85 Asn Trp Leu Asn Asp Gln Val Ile Asn Met Tyr Gly Glu Leu Ile Met 100 105 Asp Ala Val Pro Asp Lys Val His Phe Phe Asn Ser Phe Phe His Arg 120 Gln Leu Val Thr Lys Gly Tyr Asn Gly Val Lys Arg Trp Thr Lys Lys 135 Val Asp Leu Phe Lys Lys Ser Leu Leu Leu Ile Pro Ile His Leu Glu 150 155 Val His Trp Ser Leu Ile Thr Val Thr Leu Ser Asn Arg Ile Ile Ser 165 170 Phe Tyr Asp Ser Gln Gly Ile His Phe Lys Phe Cys Val Glu Asn Ile 185 Arg Lys Tyr Leu Leu Thr Glu Ala Arg Glu Lys Asn Arg Leu Asn Leu 200 205 Gln Gly Trp Gln Thr Ala Val Thr Lys Cys Ile Pro Gln Gln Lys Asn 215 220 Asp Ser Asp Cys Gly Val Phe Val Leu Gln Tyr Cys Lys Cys Leu Ala 230 235 Leu Lys Gln Pro Phe Gln Phe Ser Gln Glu Asp Met Pro Arg Val Arg 245 250

Lys Arg Ile Tyr Lys Glu Leu Cys Glu Cys Arg Leu Met Asp 260 265 270

<210> 1133
<211> 204
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(204)
<223> X = any amino acid or stop code

<400> 1133 Pro Pro Gly Gly Xaa Gln Gly Ser Ala Ala Lys His Arg Phe Pro Lys 10 Gly Tyr Arg His Pro Ala Leu Glu Ala Arg Leu Gly Arg Arg Thr Val Gln Glu Ala Arg Ala Leu Leu Arg Cys Arg Arg Ala Gly Ile Ser $_{\cdot}$ Ala Pro Val Val Phe Phe Val Asp Tyr Ala Ser Asn Cys Leu Tyr Met 55 Glu Glu Ile Glu Gly Ser Val Thr Val Arg Asp Tyr Ile Gln Ser Thr 70 75 Met Glu Thr Glu Lys Thr Pro Gln Gly Leu Ser Asn Leu Ala Lys Thr 85 90 Ile Gly Gln Val Leu Ala Arg Met His Asp Glu Asp Leu Ile His Gly · 105 Asp Leu Thr Thr Ser Asn Met Leu Leu Lys Pro Pro Leu Glu Gln Leu 120 125 Asn Ile Val Leu Ile Asp Phe Gly Leu Ser Phe Ile Ser Ala Leu Pro 135 140 Glu Asp Lys Gly Val Asp Leu Tyr Val Leu Glu Lys Ala Phe Leu Ser 150 155 Thr His Pro Asn Thr Glu Thr Val Phe Glu Ala Phe Leu Lys Ser Tyr 165 170 Ser Thr Ser Ser Lys Lys Ala Arg Pro Val Leu Lys Lys Leu Asp Glu 185 Val Arg Leu Arg Gly Lys Lys Arg Ser Met Val Gly 200

<210> 1134 <211> 531 <212>Amino acid <213> Homo sapiens

Tyr Asn Val Thr Tyr Trp Pro Leu Trp Tyr Ile Glu Leu Ala Leu Ala Ser Leu Phe Ser Leu Asn Ala Leu Phe Asp Phe Trp Arg Tyr Phe Lys Tyr Thr Val Ala Pro Thr Ser Leu Val Val Ser Pro Gly Gln Gln Thr Leu Leu Gly Leu Lys Thr Ala Val Val Gln Thr Thr Pro Pro His Asp Leu Ala Ala Thr Gln Ile Pro Pro Ala Pro Pro Ser Pro Ser Ile Gln Gly Gln Ser Val Leu Ser Tyr Ser Pro Ser Arg Ser Pro Ser Thr Ser Pro Lys Phe Thr Thr Ser Cys Met Thr Gly Tyr Ser Pro Gln Leu Gln Gly Leu Ser Ser Gly Gly Ser Gly Ser Tyr Ser Pro Gly Val Thr Tyr Ser Pro Val Ser Gly Tyr Asn Lys Leu Ala Ser Phe Ser Pro Ser Pro Pro Ser Pro Tyr Pro Thr Thr Val Gly Pro Val Glu Ser Ser Gly Leu Arg Ser Arg Tyr Arg Ser Ser Pro Thr Val Tyr Asn Ser Pro Thr Asp Lys Glu Asp Tyr Met Thr Asp Leu Arg Thr Leu Asp Thr Phe Leu Arg Ser Glu Glu Glu Lys Gln His Arg Val Lys Leu Gly Ser Pro Asp Ser Thr Ser Pro Ser Ser Ser Pro Thr Phe Trp Asn Tyr Ser Arg Ser Met Gly Asp Tyr Ala Gln Thr Leu Lys Lys Phe Gln Tyr Gln Leu Ala Cys 300 -Arg Ser Gln Ala Pro Cys Ala Asn Lys Asp Glu Ala Asp Leu Ser Ser Lys Gln Ala Ala Glu Glu Val Trp Ala Arg Val Ala Met Asn Arg Gln Leu Leu Asp His Met Asp Ser Trp Thr Ala Lys Phe Arg Asn Trp Ile Asn Glu Thr Ile Leu Val Pro Leu Val Gln Glu Ile Glu Ser Val Ser Thr Gln Met Arg Arg Met Gly Cys Pro Glu Leu Gln Ile Gly Glu Ala Ser Ile Thr Ser Leu Lys Gln Ala Ala Leu Val Lys Ala Pro Leu Ile Pro Thr Leu Asn Thr Ile Val Gln Tyr Leu Asp Leu Thr Pro Asn Gln Glu Tyr Leu Phe Glu Arg Ile Lys Glu Leu Ser Gln Gly Gly Cys Met Ser Ser Phe Arg Trp Asn Arg Gly Gly Asp Phe Lys Gly Arg Lys Trp Asp Thr Asp Leu Pro Thr Asp Ser Ala Ile Ile Met His Val Phe Cys Thr Tyr Leu Asp Ser Arg Leu Pro Pro His Pro Lys Tyr Pro Asp Gly Lys Thr Phe Thr Ser Gln His Phe Val Gln Thr Pro Asn Lys Pro Asp Val Thr Asn Glu Asn Val Phe Cys Ile Tyr Gln Ser Ala Ile Asn Pro Pro His Tyr Glu Leu Ile Tyr Gln Arg His Val Tyr Ile Pro Ala Lys Gly Gln Lys 530 531

<210> 1135

<211> 508 <212>Amino acid <213> Homo sapiens

<400> 1135 Ser Ser Ala Val Glu Phe Ile Asn Arg Asn Asn Ser Val Val Gln Val 5 Leu Leu Ala Ala Gly Ala Asp Pro Asn Leu Gly Asp Asp Phe Ser Ser Val Tyr Lys Thr Ala Lys Glu Gln Gly Ile His Ser Leu Glu Val Leu Ile Thr Arg Glu Asp Asp Phe Asn Asn Arg Leu Asn Asn Arg Ala Ser 55 Phe Lys Gly Cys Thr Ala Leu His Tyr Ala Val Leu Ala Asp Asp Tyr 70 Arg Thr Val Lys Glu Leu Leu Asp Gly Gly Ala Asn Pro Leu Gln Arg 85 90 Asn Glu Met Gly His Thr Pro Leu Asp Tyr Ala Arg Glu Gly Glu Val 100 105 Met Lys Leu Leu Arg Thr Ser Glu Ala Lys Tyr Gln Glu Lys Gln Arg 120 125 Lys Arg Glu Ala Glu Glu Arg Arg Phe Pro Leu Glu Gln Arg Leu 135 140 Lys Glu His Ile Ile Gly Gln Glu Ser Ala Ile Ala Thr Val Gly Ala 150 155 Ala Ile Arg Arg Lys Glu Asn Gly Trp Tyr Asp Glu Glu His Pro Leu 165 170 Val Phe Leu Phe Leu Gly Ser Ser Gly Ile Gly Lys Thr Glu Leu Ala 180 185 Lys Gln Thr Ala Lys Tyr Met His Lys Asp Ala Lys Lys Gly Phe Ile 200 Arg Leu Asp Met Ser Glu Phe Gln Glu Arg His Glu Val Ala Lys Phe 215 Ile Gly Ser Pro Pro Gly Tyr Val Gly His Glu Glu Gly Gly Gln Leu 230 235 Thr Lys Lys Leu Lys Gln Cys Pro Asn Ala Val Val Leu Phe Asp Glu 250 255 245 Val Asp Lys Ala His Pro Asp Val Leu Thr Ile Met Leu Gln Leu Phe 265 Asp Glu Gly Arg Leu Thr Asp Gly Lys Gly Lys Thr Ile Asp Cys Lys 280 Asp Ala Ile Phe Ile Met Thr Ser Asn Val Ala Ser Asp Glu Ile Ala 295 300 Gln His Ala Leu Gln Leu Arg Gln Glu Ala Leu Glu Met Ser Arg Asn 315 Arg Ile Ala Glu Asn Leu Gly Asp Val Gln Ile Ser Asp Lys Ile Thr 330 - 335 Ile Ser Lys Asn Phe Lys Glu Asn Val Ile Arg Pro Ile Leu Lys Ala 345 His Phe Arg Arg Asp Glu Phe Leu Gly Arg Ile Asn Glu Ile Val Tyr Phe Leu Pro Phe Cys His Ser Glu Leu Ile Gln Leu Val Asn Lys Glu 375 380 Leu Asn Phe Trp Ala Lys Arg Ala Lys Gln Arg His Asn Ile Thr Leu 390 395 Leu Trp Asp Arg Glu Val Ala Asp Val Leu Val Asp Gly Tyr Asn Val 410 His Tyr Gly Ala Arg Ser Ile Lys His Glu Val Glu Arg Arg Val Gly Asn Gln Leu Ala Ala Ala Tyr Glu Gln Asp Leu Leu Pro Gly Gly Cys

Thr Leu Arg Ile Thr Val Glu Asp Ser Asp Lys Gln Leu Leu Lys Ser 450

Pro Glu Leu Pro Ser Pro Gln Ala Glu Lys Arg Leu Pro Lys Leu Arg 465

Leu Glu Ile Ile Asp Lys Asp Ser Lys Thr Arg Arg Leu Asp Ile Arg 480

Ala Pro Leu His Pro Glu Lys Val Cys Asn Thr Ile 500

<210> 1136 <211> 81 <212>Amino acid <213> Homo sapiens

<210> 1137 <211> 260 <212>Amino acid <213> Homo sapiens

<400> 1137 His Thr Pro Met Ala Phe Phe Leu Ser Phe Leu Ser Thr Ser Glu Thr 10 Val Tyr Thr Phe Val Ile Leu Pro Lys Met Leu Ile Asn Leu Leu Ser Val Ala Arg Thr Ile Ser Phe Asn Cys Cys Ala Leu Gln Met Phe Phe 40 Phe Leu Gly Phe Ala Ile Thr Asn Cys Leu Leu Leu Gly Val Met Gly 60 Tyr Asp Arg Tyr Ala Ala Ile Cys His Pro Leu His Tyr Pro Thr Leu 70 75 Met Ser Trp Gln Val Cys Gly Lys Leu Ala Ala Cys Ala Ile Gly 90 Gly Phe Leu Ala Ser Leu Thr Val Val Asn Leu Val Phe Ser Leu Pro 100 105 Phe Cys Ser Thr Asn Lys Val Asn His Tyr Phe Cys Asp Ile Ser Ala 120 125 Val Ile Leu Leu Ala Cys Thr Asn Thr Asp Val Asn Gly Phe Val Ile 135 140 Phe Ile Cys Gly Val Leu Val Leu Val Pro Phe Leu Phe Ile Cys

150 155 Val Ser Tyr Phe Cys Ile Leu Arg Thr Ile Leu Lys Ile Pro Ser Ala 165 170 Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ser Val 185 .Val Ile Val His Tyr Gly Cys Ala Ser Phe Ile Tyr Leu Arg Pro Thr 200 Ala Asn Tyr Val Ser Asn Lys Asp Arg Leu Val Thr Val Thr Tyr Thr 215 Ile Val Thr Pro Leu Leu Asn Pro Met Val Tyr Ser Leu Arg Asn Lys 230 235 Asp Val Gln Leu Ala Ile Arg Lys Val Leu Gly Lys Lys Gly Ser Leu 250 Lys Leu Tyr Asn

<210> 1138 <211> 393 <212>Amino acid <213> Homo sapiens

<400> 1138 Arg Pro Pro Ala Ala Thr Arg Tyr Pro Arg Glu Lys Leu Lys Ser Met 5 10 Thr Ser Arg Asp Asn Tyr Lys Ala Gly Ser Arg Glu Ala Ala Ala Ala 20 Ala Ala Ala Ala Val Ala Ala Ala Ala Ala Ala Ala Ala Ala Glu 40 Pro Tyr Pro Val Ser Gly Ala Lys Arg Lys Tyr Leu Glu Asp Ser Asp 55 Pro Glu Arg Ser Asp Tyr Glu Glu Gln Gln Leu Gln Glu Glu Glu 70 75 Ala Arg Lys Val Lys Ser Gly Ile Arg Gln Met Arg Leu Phe Ser Gln 90 Asp Glu Cys Ala Lys Ile Glu Ala Arg Ile Asp Glu Val Val Ser Arg 105 Ala Glu Lys Gly Leu Tyr Asn Glu His Thr Val Asp Arg Ala Pro Leu 115 Arg Asn Lys Tyr Phe Phe Gly Glu Gly Tyr Thr Tyr Gly Ala Gln Leu 135 140 Gln Lys Arg Gly Pro Gly Gln Glu Arg Leu Tyr Pro Pro Gly Asp Val 150 155 160 Asp Glu Ile Pro Glu Trp Val His Gln Leu Val Ile Gln Lys Leu Val 170 Glu His Arg Val Ile Pro Glu Gly Phe Val Asn Ser Ala Val Ile Asn 185 Asp Tyr Gln Pro Gly Gly Cys Ile Val Ser His Val Asp Pro Ile His 200 Ile Phe Glu Arg Pro Ile Val Ser Val Ser Phe Phe Ser Asp Ser Ala 215 Leu Cys Phe Gly Cys Lys Phe Gln Phe Lys Pro Ile Arg Val Ser Glu 230 235 Pro Val Leu Ser Leu Pro Val Arg Arg Gly Ser Val Thr Val Leu Ser 245 250 Gly Tyr Ala Ala Asp Glu Ile Thr His Cys Ile Arg Pro Gln Asp Ile 265 Lys Glu Arg Arg Ala Val Ile Ile Leu Arg Lys Thr Arg Leu Asp Ala 280 Pro Arg Leu Glu Thr Lys Ser Leu Ser Ser Ser Val Leu Pro Pro Ser

290 295 Tyr Ala Ser Asp Arg Leu Ser Gly Asn Asn Arg Asp Pro Ala Leu Lys 310 315 Pro Lys Arg Ser His Arg Lys Ala Asp Pro Asp Ala Ala His Arg Pro 325 330 Arg Ile Leu Glu Met Asp Lys Glu Glu Asn Arg Arg Ser Val Leu Leu . 340 345 Pro Thr His Arg Arg Gly Ser Phe Ser Ser Glu Asn Tyr Trp Arg 355 360 Lys Ser Tyr Glu Ser Ser Glu Asp Cys Ser Glu Ala Ala Gly Ser Pro 375 Ala Arg Lys Val Lys Met Arg Arg His 390

<210> 1139 <211> 545 <212>Amino acid <213> Homo sapiens

<400> 1139 Val Thr Trp His Phe Tyr Phe Cys Ser Asp His Lys Asn Gly His Tyr 10 Ile Ile Pro Gln Met Ala Asp Arg Ser Arg Gln Lys Cys Met Ser Gln Ser Leu Asp Leu Ser Glu Leu Ala Lys Ala Ala Lys Lys Leu Gln 40 Ala Leu Ser Asn Arg Leu Phe Glu Glu Leu Ala Met Asp Val Tyr Asp Glu Val Asp Arg Arg Glu Asn Asp Ala Val Trp Leu Ala Thr Gln Asn 70 His Ser Thr Leu Val Thr Glu Arg Ser Ala Val Pro Phe Leu Pro Val 90 Asn Pro Glu Tyr Ser Ala Thr Arg Asn Gln Gly Arg Gln Lys Leu Ala 105 Arg Phe Asn Ala Arg Glu Phe Ala Thr Leu Ile Ile Asp Ile Leu Ser 120 125 Glu Ala Lys Arg Arg Gln Gln Gly Lys Ser Leu Ser Ser Pro Thr Asp 135 140 Asn Leu Glu Leu Ser Leu Arg Ser Gln Ser Asp Leu Asp Asp Gln His 150 155 Asp Tyr Asp Ser Val Ala Ser Asp Glu Asp Thr Asp Gln Glu Pro Leu 165 170 Arg Ser Thr Gly Ala Thr Arg Ser Asn Arg Ala Arg Ser Met Asp Ser 180 185 190 Ser Asp Leu Ser Asp Gly Ala Val Thr Leu Gln Glu Tyr Leu Glu Leu 200 Lys Lys Ala Leu Ala Thr Ser Glu Ala Lys Val Gln Gln Leu Met Lys 215 220 Val Asn Ser Ser Leu Ser Asp Glu Leu Arg Arg Leu Gln Arg Glu His 230 235 Phe Ala Pro Ile Ile His Lys Leu Gln Ala Glu Asn Leu Gln Leu Arg 245 250 Gln Pro Pro Gly Pro Val Pro Thr Pro Pro Leu Pro Ser Glu Arg Ala 260 265 Glu His Thr Pro Met Ala Pro Gly Gly Ser Thr His Arg Arg Asp Arg 280 Gln Ala Phe Ser Met Tyr Glu Pro Gly Ser Ala Leu Lys Pro Phe Gly 295 Gly Pro Pro Gly Asp Glu Leu Thr Thr Arg Leu Gln Pro Phe His Ser

305 310 315 Thr Glu Leu Glu Asp Asp Ala Ile Tyr Ser Val His Val Pro Ala Gly 325 330 Leu Tyr Arg Ile Arg Lys Gly Val Ser Ala Ser Ala Val Pro Phe Thr 345 Pro Ser Ser Pro Leu Leu Ser Cys Ser Gln Glu Gly Ser Arg His Thr Ser Lys Leu Ser Arg His Gly Ser Gly Ala Asp Ser Asp Tyr Glu Asn 375 Thr Gln Ser Gly Asp Pro Leu Leu Gly Leu Glu Gly Lys Arg Phe Leu 390 395 Glu Leu Gly Lys Glu Glu Asp Phe His Pro Glu Leu Glu Ser Leu Asp 405 410 Gly Asp Leu Asp Pro Gly Leu Pro Ser Thr Glu Asp Val Ile Leu Lys 420 425 Thr Glu Gln Val Thr Lys Asn Ile Gln Glu Leu Leu Arg Ala Ala Gln 440 Glu Phe Lys His Asp Ser Phe Val Pro Cys Ser Glu Lys Ile His Leu 455 460 Ala Val Thr Glu Met Ala Ser Leu Phe Pro Lys Arg Pro Ala Leu Glu 470 475 Pro Val Arg Ser Ser Leu Arg Leu Leu Asn Ala Ser Ala Tyr Arg Leu 485 490 Gln Ser Glu Cys Arg Lys Thr Val Pro Pro Glu Pro Gly Ala Pro Val 500 505 Asp Phe Gln Leu Leu Thr Gln Gln Val Ile Gln Cys Ala Tyr Asp Ile 520 Ala Lys Ala Ala Lys Gln Leu Val Thr Ile Thr Thr Arg Glu Lys Lys Gln ' 545

<210> 1140 <211> 621 <212>Amino acid <213> Homo sapiens

<400> 1140 Arg Tyr Leu Ser Tyr Gly Ser Gly Pro Lys Arg Phe Pro Leu Val Asp 5 · 10 Val Leu Gln Tyr Ala Leu Glu Phe Ala Ser Ser Lys Pro Val Cys Thr 25 Ser Pro Val Asp Asp Ile Asp Ala Ser Ser Pro Pro Ser Gly Ser Ile 40 Pro Ser Gln Thr Leu Pro Ser Thr Thr Glu Gln Gln Gly Ala Leu Ser . 55 Ser Glu Leu Pro Ser Thr Ser Pro Ser Ser Val Ala Ala Ile Ser Ser 75 Arg Ser Val Ile His Lys Pro Phe Thr Gln Ser Arg Ile Pro Pro Asp 90 Leu Pro Met His Pro Ala Pro Arg His Ile Thr Glu Glu Glu Leu Ser 100 105 Val Leu Glu Ser Cys Leu His Arg Trp Arg Thr Glu Ile Glu Asn Asp 120 125 Thr Arg Asp Leu Gln Glu Ser Ile Ser Arg Ile His Arg Thr Ile Glu 135 140 Leu Met Tyr Ser Asp Lys Ser Met Ile Gln Val Pro Tyr Arg Leu His 150 155 Ala Val Leu Val His Glu Gly Gln Ala Asn Ala Gly His Tyr Trp Ala

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170
Tyr Ile Phe Asp His Arg Glu Ser Arg Trp Met Lys Tyr Asn Asp Ile
                               185
Ala Val Thr Lys Ser Ser Trp Glu Glu Leu Val Arg Asp Ser Phe Gly
                           200
Gly Tyr Arg Asn Ala Ser Ala Tyr Cys Leu Met Tyr Ile Asn Asp Lys
                       215
                                           220
Ala Gln Phe Leu Ile Gln Glu Glu Phe Asn Lys Glu Thr Gly Gln Pro
                   230
                                       235
Leu Val Gly Ile Glu Thr Leu Pro Pro Asp Leu Arg Asp Phe Val Glu
               245
                                   250
Glu Asp Asn Gln Arg Phe Glu Lys Glu Leu Glu Glu Trp Asp Ala Gln
                               265
Leu Ala Gln Lys Ala Leu Gln Glu Lys Leu Leu Ala Ser Gln Lys Leu
                           280
Arg Glu Ser Glu Thr Ser Val Thr Thr Ala Gln Ala Ala Gly Asp Pro
                       295
Lys Tyr Leu Glu Gln Pro Ser Arg Ser Asp Phe Ser Lys His Leu Lys
                  310
                                      315
Glu Glu Thr Ile Gln Ile Ile Thr Lys Ala Ser His Glu His Glu Asp
               325
                                   330
Lys Ser Pro Glu Thr Val Leu Gln Ser Ala Ile Lys Leu Glu Tyr Ala
           340
                               345
Arg Leu Val Lys Leu Ala Gln Glu Asp Thr Pro Pro Glu Thr Asp Tyr
                           360
Arg Leu His His Val Val Val Tyr Phe Ile Gln Asn Gln Ala Pro Lys
                       375
                                           380
Lys Ile Ile Glu Lys Thr Leu Leu Glu Gln Phe Gly Asp Arg Asn Leu
                   390
                                       395
Ser Phe Asp Glu Arg Cys His Asn Ile Met Lys Val Ala Gln Ala Lys
               405
                                  410
Leu Glu Met Ile Lys Pro Glu Glu Val Asn Leu Glu Glu Tyr Glu Glu
           420
                               425
Trp His Gln Asp Tyr Arg Lys Phe Arg Glu Thr Thr Met Tyr Leu Ile
                           440
Ile Gly Leu Glu Asn Phe Gln Arg Glu Ser Tyr Ile Asp Ser Leu Leu
                      455
Phe Leu Ile Cys Ala Tyr Gln Asn Asn Lys Glu Leu Leu Ser Lys Gly
                470
                                       475
Leu Tyr Arg Gly His Asp Glu Glu Leu Ile Ser His Tyr Arg Arg Glu
              485
                      , 490
Cys Leu Leu Lys Leu Asn Glu Gln Ala Ala Glu Leu Phe Glu Ser Gly
          500
                              505
Glu Asp Arg Glu Val Asn Asn Gly Leu Ile Ile Met Asn Glu Phe Ile
                          520
Val Pro Phe Leu Pro Leu Leu Leu Val Asp Glu Met Glu Glu Lys Asp
                      535
                                           540
Ile Leu Ala Val Glu Asp Met Arg Asn Arg Trp Cys Ser Tyr Leu Gly
                  550
                                       555
Gln Glu Met Glu Pro His Leu Gln Glu Lys Leu Thr Asp Phe Leu Pro
                                  570
Lys Leu Leu Asp Cys Ser Met Glu Ile Lys Ser Phe His Glu Pro Pro
                              585
Lys Leu Pro Ser Tyr Ser Thr His Glu Leu Cys Glu Arg Phe Ala Arg
                          600
Ile Met Leu Ser Leu Ser Arg Thr Pro Ala Asp Gly Arg
                      615
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<210> 1141

<211> 154

<212>Amino acid

<213> Homo sapiens

<400> 1141 Ala Gln Val Tyr Val Arg Met Asp Ser Phe Asp Glu Asp Leu Ala Arg 10 Pro Ser Gly Leu Leu Ala Gln Glu Arg Lys Leu Cys Arg Asp Leu Val 25 His Ser Asn Lys Lys Glu Gln Glu Phe Arg Ser Ile Phe Gln His Ile 40 Gln Ser Ala Gln Ser Gln Arg Ser Pro Ser Glu Leu Phe Ala Gln His Met Val Pro Ile Val His His Val Lys Glu His His Phe Gly Ser Ser 75 Gly Met Thr Leu His Glu Arg Phe Thr Lys Tyr Leu Lys Arg Gly Thr Glu Gln Glu Ala Ala Lys Asn Lys Lys Ser Pro Glu Ile His Arg Arg 100 105 110 Ile Asp Ile Ser Pro Ser Thr Phe Arg Lys His Gly Leu Ala His Asp 115 120 125 Glu Met Lys Ser Pro Arg Glu Pro Gly Tyr Lys Asp Gly His Asn Ser 135 Lys Asn Glu Leu Gln Arg Val Asn Phe Tyr 145 150 154

<210> 1142 <211> 121 <212>Amino acid <213> Homo sapiens

<400> 1142 Thr Tyr Thr Phe Cys Phe Ser Leu Met Ile Ile Leu Leu Thr Ile Ile **10** . Gln Gly Leu Ile Leu Glu Ala Phe Gly Glu Leu Arg Asp Gln Leu Asp 25 Gln Val Lys Glu Asp Met Glu Thr Lys Cys Phe Ile Cys Gly Ile Gly 40 Asn Asp Tyr Phe Asp Thr Val Pro His Gly Phe Glu Thr His Thr Leu 55 Gln Glu His Asn Leu Ala Asn Tyr Leu Phe Phe Leu Met Tyr Leu Ile 70 75 80 Asn Lys Asp Glu Thr Glu His Thr Gly Gln Glu Ser Tyr Val Trp Lys 8.5 90 Met Tyr Gln Glu Arg Cys Trp Glu Phe Phe Pro Ala Gly Asp Cys Phe 105 Arg Lys Gln Tyr Glu Asp Gln Leu Asn 120 121

<210> 1143 <211> 851 <212>Amino acid <213> Homo sapiens

<400> 1143 Phe Arg Arg Lys Gly Gly Gly Pro Lys Asp Phe Gly Ala Gly Leu 10 Lys Tyr Asn Ser Arg His Glu Lys Val Asn Gly Leu Glu Glu Gly Val Glu Phe Leu Pro Val Asn Asn Val Lys Lys Val Glu Lys His Gly Pro 40 Gly Arg Trp Val Val Leu Ala Ala Val Leu Ile Gly Leu Leu Leu Val 55 Leu Leu Gly Ile Gly Phe Leu Val Trp His Leu Gln Tyr Arg Asp Val 70 75 Arg Val Gln Lys Val Phe Asn Gly Tyr Met Arg Ile Thr Asn Glu Asn 90 Phe Val Asp Ala Tyr Glu Asn Ser Asn Ser Thr Glu Phe Val Ser Leu 105 Ala Ser Lys Val Lys Asp Ala Leu Lys Leu Leu Tyr Ser Gly Val Pro 120 Phe Leu Gly Pro Tyr His Lys Glu Ser Ala Val Thr Ala Phe Ser Glu 135 140 Gly Ser Val Ile Ala Tyr Tyr Trp Ser Glu Phe Ser Ile Pro Gln His 150 155 Leu Val Glu Glu Ala Glu Arg Val Met Ala Glu Glu Arg Val Val Met 165 170 Leu Pro Pro Arg Ala Arg Ser Leu Lys Ser Phe Val Val Thr Ser Val 180 185 Val Ala Phe Pro Thr Asp Ser Lys Thr Val Gln Arg Thr Gln Asp Asn 200 Ser Cys Ser Phe Gly Leu His Ala Arg Gly Val Glu Leu Met Arg Phe 215 220 Thr Thr Pro Gly Phe Pro Asp Ser Pro Tyr Pro Ala His Ala Arg Cys 230 235 Gln Trp Ala Leu Arg Gly Asp Ala Asp Ser Val Leu Ser Leu Thr Phe 245 250 Arg Ser Phe Asp Leu Ala Ser Cys Asp Glu Arg Gly Arg His Leu Val 265 Thr Val Tyr Asn Thr Leu Ser Pro Met Glu Pro His Ala Leu Val Gln 275 280 285 Leu Cys Gly Thr Tyr Pro Pro Ser Tyr Asn Leu Thr Phe His Ser Ser 295 300 Gln Asn Val Leu Leu Ile Thr Leu Ile Thr Asn Thr Glu Arg Arg His 310 315 Pro Gly Phe Glu Ala Thr Phe Phe Gln Leu Pro Arg Met Ser Ser Cys 325 330 Gly Gly Arg Leu Arg Lys Ala Gln Gly Thr Phe Asn Ser Pro Tyr Tyr 345 Pro Gly His Tyr Pro Pro Asn Ile Asp Cys Thr Trp Asn Ile Glu Val 360 Pro Asn Asn Gln His Val Lys Val Arg Phe Lys Phe Phe Tyr Leu Leu 375 Glu Pro Gly Val Pro Ala Gly Thr Cys Pro Lys Asp Tyr Val Glu Ile 390 395 Asn Gly Glu Lys Tyr Cys Gly Glu Arg Ser Gln Phe Val Val Thr Ser 405 410 Asn Ser Asn Lys Ile Thr Val Arg Phe His Ser Asp Gln Ser Tyr Thr 425 Asp Thr Gly Phe Leu Ala Glu Tyr Leu Ser Tyr Asp Ser Ser Asp Pro 440 Cys Pro Gly Gln Phe Thr Cys Arg Thr Gly Arg Cys Ile Arg Lys Glu 455 460 Leu Arg Cys Asp Gly Trp Ala Asp Cys Thr Asp His Ser Asp Glu Leu 470 475 Asn Cys Ser Cys Asp Ala Gly His Gln Phe Thr Cys Lys Asn Lys Phe 485 490 Cys Lys Pro Leu Phe Trp Val Cys Asp Ser Leu Asn Asp Cys Gly Asp

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505
          500
                                                510
Asn Ser Asp Glu Gln Gly Cys Ser Cys Pro Ala Gln Thr Phe Arg Cys
                       520
Ser Asn Gly Lys Cys Leu Ser Lys Ser Gln Gln Cys Asn Gly Lys Asp
                      535
Asp Cys Gly Asp Gly Ser Asp Glu Ala Ser Cys Pro Lys Val Asn Val
                  550
                                    555
Val Thr Cys Thr Lys His Thr Tyr Arg Cys Leu Asn Gly Leu Cys Leu
              565
                                 570
Ser Lys Gly Asn Pro Glu Cys Asp Gly Lys Glu Asp Cys Ser Asp Gly
                             585
Ser Asp Glu Lys Asp Cys Asp Cys Gly Leu Arg Ser Phe Thr Arg Gln
      595 600
Ala Arg Val Val Gly Gly Thr Asp Ala Asp Glu Gly Glu Trp Pro Trp
                     615
Gln Val Ser Leu His Ala Leu Gly Gln Gly His Ile Cys Gly Ala Ser
                  630
                                    635
Leu Ile Ser Pro Asn Trp Leu Val Ser Ala Ala His Cys Tyr Ile Asp
                                650
Asp Arg Gly Phe Arg Tyr Ser Asp Pro Thr Gln Trp Thr Ala Phe Leu
                            665
Gly Leu His Asp Gln Ser Gln Arg Ser Ala Pro Gly Val Gln Glu Arg
                        680
Arg Leu Lys Arg Ile Ile Ser His Pro Phe Phe Asn Asp Phe Thr Phe
                     695
                                        700
Asp Tyr Asp Ile Ala Leu Leu Glu Leu Glu Lys Pro Ala Glu Tyr Ser
                 710
Ser Met Val Arg Pro Ile Cys Leu Pro Asp Ala Ser His Val Phe Pro
              725 730
Ala Gly Lys Ala Ile Trp Val Thr Gly Trp Gly His Thr Gln Tyr Gly
          740 745
Gly Thr Gly Ala Leu Ile Leu Gln Lys Gly Glu Ile Arg Val Ile Asn
       755 760
Gln Thr Thr Cys Glu Asn Leu Leu Pro Gln Gln Ile Thr Pro Arg Met
            775
                                 780
Met Cys Val Gly Phe Leu Ser Gly Gly Val Asp Ser Cys Gln Gly Asp
              790
                                    795
Ser Gly Gly Pro Leu Ser Ser Val Glu Ala Asp Gly Arg Ile Phe Gln
                                810
Ala Gly Val Val Ser Trp Gly Asp Gly Cys Ala Gln Arg Asn Lys Pro
                            825
Gly Val Tyr Thr Arg Leu Pro Leu Phe Arg Asp Trp Ile Lys Glu Asn
Thr Gly Val
   850 851
    <210> 1144
    <211> 346
    <212>Amino acid
  <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (1)...(346)
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<400> 1144
Arg His Glu Glu Asp Leu Gly Asn Leu Trp Glu Asn Thr Arg Phe Thr
1 5 10 15

<223> X = any amino acid or stop code

Asp Cys Ser Phe Phe Val Arg Gly Gln Glu Phe Lys Ala His Lys Ser 25 Val Leu Ala Ala Arg Ser Pro Val Phe Asn Ala Met Phe Glu His Glu 40 Met Glu Glu Ser Lys Lys Asn Arg Val Glu Ile Asn Asp Leu Asp Pro 55 Glu Val Phe Lys Glu Met Met Arg Phe Ile Tyr Thr Gly Arg Ala Pro 70 75 Asn Leu Asp Lys Met Ala Asp Asn Leu Leu Ala Ala Ala Asp Lys Tyr 90 Ala Leu Glu Arg Leu Lys Val Met Cys Glu Lys Ala Leu Cys Ser Asn 100 105 Leu Ser Val Glu Asn Val Ala Asp Thr Leu Val Leu Ala Asp Leu His 120 Ser Ala Glu Gln Leu Lys Ala Gln Ala Ile Asp Phe Ile Asn Arg Cys 135 140 Ser Val Leu Arg Gln Leu Gly Cys Lys Asp Gly Lys Asn Trp Asn Ser 150 155 Asn Gln Ala Thr Asp Ile Met Glu Thr Ser Gly Gly Lys Ser Met Ile 165 170 Gln Ser His Pro His Leu Val Ala Glu Ala Phe Arg Ala Leu Ala Ser 185 Ala Gln Gly Pro Gln Phe Gly Ile Pro Arg Lys Arg Leu Lys Gln Ser 200 Xaa Asn Leu Gly Asn Leu Trp Glu Asn Thr Arg Phe Thr Asp Cys Ser 215 220 Phe Phe Val Arg Gly Gln Glu Phe Lys Ala His Lys Ser Val Leu Ala 230 235 Ala Arg Ser Pro Val Phe Asn Ala Met Phe Glu His Glu Met Glu Glu 245 250 Ser Lys Lys Asn Arg Val Glu Ile Asn Asp Leu Asp Pro Glu Val Phe 260 265 270 Lys Glu Met Met Arg Phe Ile Tyr Thr Gly Arg Ala Pro Asn Leu Asp 275 · 280 Lys Met Ala Asp Asn Leu Leu Ala Ala Ala Asp Lys Tyr Ala Leu Glu 295 300 Arg Leu Lys Val Met Cys Glu Lys Ala Leu Cys Ser Asn Leu Ser Val 315 - 320 310 Glu Asn Val Ala Asp Thr Leu Val Leu Ala Asp Leu His Ser Gly Arg 330 Thr Val Glu Ser Thr Ser His Arg Leu Tyr 340 345 346

<210> 1145 <211> 339 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(339)

<223> X = any amino acid or stop code

40 Met Xaa Trp Gly Pro Ser Pro Ile Ser His Pro Thr Ser Leu Cys Pro Gly Gly Gly Gla Gly Gln Thr Thr Gly Ser Leu Cys Leu Gly Gln Gln Cys Cys Pro Leu Ser Cys Pro Asn Ile Pro Ser Arg His Lys Arg Trp Arg Leu Xaa Ala Ala Leu Val Ala Gly Ser Arg Gly Ser Cys Thr 105 Leu Arg Ser Xaa Arg Xaa Arg Thr Pro Leu Pro Val Thr Arg Asn Leu 120 Pro Arg Cys His Leu His Leu His Pro Thr Gly Asp Leu Arg Val His 135 Val His Gln His Cys Leu Leu His Gly His Val Pro Pro Gly Ala Ala 155 Leu Leu Gln Cys Gly Gly Cys Asp Leu Arg Gly Glu Ala Ala Gly Leu .165 170 Leu Phe Leu Gly His Ala Cys Leu Arg Gly Ser Val Asn Leu Arg Arg 185 Asp Gln Trp Leu Pro Val Pro Tyr Ser Arg Leu Cys Phe Ser Gly Ala 200 Arg Glu Gly His Leu Pro Ser Leu Leu Ala Met Ile His Val Arg His 215 220 Cys Thr Pro Ile Pro Ala Leu Leu Val Cys Pro Ile Lys Val Asn Leu 235 Leu Ile Pro Val Ala Tyr Leu Val Phe Trp Ala Phe Leu Leu Val Phe 250 Ser Phe Ile Ser Glu His Met Val Cys Gly Val Gly Val Ile Ile Ile 265 Leu Thr Gly Val Pro Ile Phe Phe Leu Gly Val Phe Trp Arg Ser Lys 280 Pro Lys Cys Val His Arg Leu Thr Glu Ser Met Thr His Trp Gly Gln 295 Glu Leu Cys Phe Val Val Tyr Pro Gln Asp Ala Pro Glu Glu Glu Glu 310 315 Asn Gly Pro Cys Pro Pro Ser Leu Leu Pro Ala Thr Asp Lys Pro Ser 325 330 Lys Pro Gln 339

<210> 1146 <211> 425 <212>Amino acid

<220> <221> misc_feature <222> (1)...(425)

<213> Homo sapiens

<223> X = any amino acid or stop code

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Leu Glu Gln Ala Ala Gly Tyr Phe Thr Met Gly Gly Leu Tyr Glu Ala
                     70
                                         75
Val Asn Glu Val Tyr Lys Asn Leu Ile Pro Ile Leu Glu Ala His Arg
                 85
                                     90
Asp Tyr Lys Lys Leu Ala Ala Val His Gly Lys Leu Gln Glu Ala Phe
                                105
Thr Lys Ile Met His Gln Ser Ser Gly Trp Glu Arg Val Phe Gly Thr
                            120
                                                125
Tyr Phe Arg Val Gly Phe Tyr Gly Ala His Phe Gly Asp Leu Asp Glu
                       135
Gln Glu Phe Val Tyr Lys Glu Pro Ser Ile Thr Lys Leu Ala Glu Ile
                    150
                                        155
Ser His Arg Leu Glu Glu Phe Tyr Thr Glu Arg Phe Gly Asp Asp Val
                165
                                    170
Val Glu Ile Ile Lys Asp Ser Asn Pro Val Asp Lys Ser Lys Leu Asp
                                185
                                                    190
Ser Gln Lys Ala Tyr Ile Gln Ile Thr Tyr Val Glu Pro Tyr Phe Asp
                            200
                                                205
Thr Tyr Glu Leu Lys Asp Arg Val Thr Tyr Phe Asp Arg Asn Tyr Gly
                       215
                                            220
Leu Arg Thr Phe Leu Phe Cys Thr Pro Phe Thr Pro Asp Gly Arg Ala
                    230
                                        235
His Gly Glu Leu Pro Glu Gln His Lys Arg Lys Thr Leu Leu Ser Thr
                245
                                    250
Asp His Ala Phe Pro Tyr Ile Lys Thr Arg Ile Arg Val Cys His Arg
                                265
                                                    270
Glu Glu Thr Val Leu Thr Pro Val Glu Val Ala Ile Glu Asp Met Gln
                            280
                                                285
Lys Lys Thr Arg Glu Leu Ala Phe Ala Thr Glu Gln Asp Pro Pro Asp
                        295
Ala Lys Met Leu Gln Met Val Leu Gln Gly Ser Val Gly Pro Thr Val
                    310
                                        315
Asn Gln Gly Pro Leu Glu Val Ala Gln Val Phe Leu Ala Glu Ile Pro
               325
                                    330
Glu Asp Pro Lys Leu Phe Arg His His Asn Lys Leu Arg Leu Cys Phe
                                345
Lys Asp Phe Xaa Lys Lys Cys Glu Asp Ala Leu Arg Lys Asn Lys Ala
                            360
Leu Ile Gly Pro Asp Gln Lys Glu Tyr His Arg Glu Leu Glu Arg Asn
                        375
Tyr Cys Arg Leu Arg Glu Ala Leu Gln Pro Leu Leu Thr Gln Arg Leu
                   390
                                        395
Pro Gln Leu Met Ala Pro Thr Pro Pro Gly Leu Arg Asn Ser Leu Asn
               405
Arg Ala Ser Phe Arg Lys Ala Asp Leu
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<210> 1147
<211> 198
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(198)
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<223> X = any amino acid or stop code

<400> 1147
Gly Glu Gly Gln Gln Trp Gln Ser Thr Pro Leu Ser Pro Leu Gln Pro

10 Thr Val Ala Asp Phe Leu Asn Leu Ala Trp Trp Thr Ser Ala Ala Ala 25 Trp Xaa Val Leu Ser Gly Arg Trp Val Glu Lys Val Leu Pro Gly Arg Glu Gly Ser Glu Glu Lys Xaa Gly Met Ala Ser Ser Ser Ala Asp His Leu His Ser Ala Pro Arg Ala Leu Gln Ser Leu Phe Gln Gln Leu Leu Tyr Gly Leu Ile Tyr His Ser Trp Phe Gln Ala Gly Arg Xaa Gly Phe Gly Gly Ala Ser Ser Pro Gly Pro Gln Ser Glu Leu Arg Arg Leu 100 105 His Gly Glu Gly Val Tyr Asp Xaa Gly Arg Pro Glu Thr Leu Pro 120 125 Gly Ser Val Gly Gly Ala Glu Ala Leu Trp Ala Leu Ala Asp Pro Ala 135 140 Glu Ala Glu Gly Ser Pro Glu Thr Arg Glu Ser Ser Cys Val Met Lys 150 155 Gln Thr Gln Tyr Tyr Phe Gly Ser Val Asn Ala Ser Tyr Asn Ala Ile 165 170 Ile Asp Cys Gly Asn Cys Ser Arg Cys Trp Gln Trp Gly Gly Thr Arg 180 185 Gly Gln Gly Arg Asn Leu 195

<210> 1148 <211> 317 <212>Amino acid <213> Homo sapiens

<400> 1148 Val Ala Gly Ile Pro Ala Cys Phe Asp Asn Phe Thr Glu Ala Leu Ala 10 Glu Thr Ala Cys Arg Gln Met Gly Tyr Ser Ser Lys Pro Thr Phe Arg 20 25 Ala Val Glu Ile Gly Pro Asp Gln Asp Leu Asp Val Val Glu Ile Thr 40 Glu Asn Ser Gln Glu Leu Arg Met Arg Asn Ser Ser Gly Pro Cys Leu 55 Ser Gly Ser Leu Val Ser Leu His Cys Leu Ala Cys Gly Glu Ser Leu 70 75 Lys Thr Pro Arg Val Val Gly Gly Glu Glu Ala Ser Val Asp Ser Trp 85 90 Pro Trp Gln Val Ser Ile Gln Tyr Asp Lys Gln His Val Cys Gly Gly 1.05 Ser Ile Leu Asp Pro His Trp Val Leu Thr Ala Ala His Cys Phe Arg 120 Lys His Thr Asp Val Phe Asn Trp Lys Val Arg Ala Gly Ser Asp Lys 135 Leu Gly Ser Phe Pro Ser Leu Ala Val Ala Lys Ile Ile Ile Glu 150 155 Phe Asn Pro Met Tyr Pro Lys Asp Asn Asp Ile Ala Leu Met Lys Leu 170 Gln Phe Pro Leu Thr Phe Ser Gly Thr Val Arg Pro Ile Cys Leu Pro 185 190 Phe Phe Asp Glu Glu Leu Thr Pro Ala Thr Pro Leu Trp Ile Ile Gly 200 Trp Gly Phe Thr Lys Gln Asn Gly Gly Lys Met Ser Asp Ile Leu Leu

210 215 220 Gln Ala Ser Val Gln Val Ile Asp Ser Thr Arg Cys Asn Ala Asp Asp 230 235 Ala Tyr Gln Gly Glu Val Thr Glu Lys Met Met Cys Ala Gly Ile Pro 245 250 255 Glu Gly Gly Val Asp Thr Cys Gln Gly Asp Ser Gly Gly Pro Leu Met 260 . 265 Tyr Gln Ser Asp Gln Trp His Val Val Gly Ile Val Ser Trp Gly Tyr 280 285 Gly Cys Gly Gly Pro Ser Thr Pro Gly Val Tyr Thr Lys Val Ser Ala 295 300 Tyr Leu Asn Trp Ile Tyr Asn Val Trp Lys Ala Glu Leu

<210> 1149 <211> 320 <212>Amino acid <213> Homo sapiens

<400> 1149

Thr Ile Ser Thr Val Arg Trp Asn Ser Arg Ile Gly Met Val Leu Gly 5 10 Val Ala Ile Gln Lys Arg Ala Val Pro Gly Leu Tyr Ala Phe Glu Glu 25 Ala Tyr Ala Arg Ala Asp Lys Glu Ala Pro Arg Pro Cys His Lys Gly 40 Ser Trp Cys Ser Ser Asn Gln Leu Cys Arg Glu Cys Gln Ala Phe Met 55 Ala His Thr Met Pro Lys Leu Lys Ala Phe Ser Met Ser Ser Ala Tyr 70 75 Asn Ala Tyr Arg Ala Val Tyr Ala Val Ala His Gly Leu His Gln Leu 90 Leu Gly Cys Ala Ser Gly Ala Cys Ser Arg Gly Arg Val Tyr Pro Trp 105 Gln Leu Leu Glu Gln Ile His Lys Val His Phe Leu Leu His Lys Asp 120 Thr Val Ala Phe Asn Asp Asn Arg Asp Pro Leu Ser Ser Tyr Asn Ile 130 135 140 Ile Ala Trp Asp Trp Asn Gly Pro Lys Trp Thr Phe Thr Val Leu Gly 150 155 160 Ser Ser Thr Trp Ser Pro Val Gln Leu Asn Ile Asn Glu Thr Lys Ile 165 170 Gln Trp His Gly Lys Asp Asn Gln Val Pro Lys Ser Val Cys Ser Ser 180 185 Asp Cys Leu Glu Gly His Gln Arg Val Val Thr Gly Phe His His Cys 200 195 Cys Phe Glu Cys Val Pro Cys Gly Ala Gly Thr Phe Leu Asn Lys Ser 215 Ser Tyr Leu Gly Lys Asp Leu Pro Glu Asn Tyr Asn Glu Ala Lys Cys 225 230 235 240 Val Thr Phe Ser Leu Leu Phe Asn Phe Val Ser Trp Ile Ala Phe Phe 250 255 Thr Thr Ala Ser Val Tyr Asp Gly Lys Tyr Leu Pro Ala Ala Asn Met 265 Met Ala Gly Leu Ser Ser Leu Ser Ser Gly Phe Gly Gly Tyr Phe Leu 280 Pro Lys Cys Tyr Val Ile Leu Cys Arg Pro Asp Leu Asn Ser Thr Glu 290 300 His Phe Gln Ala Ser Ile Gln Asp Tyr Thr Arg Arg Cys Gly Ser Thr

305 310 315 320

<210> 1150 <211> 458 <212>Amino acid <213> Homo sapiens

<400> 1150 Val Ala Arg Gly Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser 10 Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser 25 Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu 40 His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala 60 Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile 70 75 Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro 100 105 Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr 120 Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe 135 140 Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys 150 155 Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu 165 170 Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn 185 Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser 200 Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe 215 Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val 230 235 240 Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val 245 250 255 Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn 260 265 Thr Ala Gly Ala Gly Ala Thr Gly Gly Ile Ile Gly Gly Ile Ile Ala 275 280 Ala Ile Ile Ala Thr Ala Asp Ala Thr Gly Ile Leu Ile Cys Arg Gln 295 300 Gln Arg Lys Glu Gln Thr Leu Gln Gly Ala Glu Glu Asp Glu Asp Leu 310 315 Glu Gly Pro Pro Ser Tyr Lys Pro Pro Thr Pro Lys Ala Lys Leu Glu 330 Ala Gln Glu Met Pro Ser Gln Leu Phe Thr Leu Gly Ala Ser Glu His 345 Ser Pro Leu Lys Thr Pro Tyr Phe Asp Ala Gly Ala Ser Cys Thr Glu 360 Gln Glu Met Pro Arg Tyr His Glu Leu Pro Thr Leu Glu Glu Arg Ser 375 380 Gly Pro Leu His Pro Gly Ala Thr Ser Leu Gly Ser Pro Ile Pro Val

<210> 1151 <211> 608 <212>Amino acid <213> Homo sapiens

<400> 1151

Gly Thr Arg Leu Arg Glu Asp Lys Asn His Asn Met Tyr Val Ala Gly 10 Cys Thr Glu Val Glu Val Lys Ser Thr Glu Glu Ala Phe Glu Val Phe 25 Trp Arg Gly Gln Lys Lys Arg Arg Ile Ala Asn Thr His Leu Asn Arg 40 Glu Ser Ser Arg Ser His Ser Val Phe Asn Ile Lys Leu Val Gln Ala 55 Pro Leu Asp Ala Asp Gly Asp Asn Val Leu Gln Glu Lys Glu Gln Ile 75 Thr Ile Ser Gln Leu Ser Leu Val Asp Leu Ala Gly Ser Glu Arg Thr 90 Asn Arg Thr Arg Ala Glu Gly Asn Arg Leu Arg Glu Ala Gly Asn Ile 105 Asn Gln Ser Leu Met Thr Leu Arg Thr Cys Met Asp Val Leu Arg Glu 120 Asn Gln Met Tyr Gly Thr Asn Lys Met Val Pro Tyr Arg Asp Ser Lys 135 140 Leu Thr His Leu Phe Lys Asn Tyr Phe Asp Gly Glu Gly Lys Val Arg 155 Met Ile Val Cys Val Asn Pro Lys Ala Glu Asp Tyr Glu Glu Asn Leu 170 Gln Val Met Arg Phe Ala Glu Val Thr Gln Glu Val Glu Val Ala Arg 185 Pro Val Asp Lys Ala Ile Cys Gly Leu Thr Pro Gly Arg Arg Tyr Arg 200 Asn Gln Pro Arg Gly Pro Ile Gly Asn Glu Pro Leu Val Thr Asp Val 215 . 220 Val Leu Gln Ser Phe Pro Pro Leu Pro Ser Cys Glu Ile Leu Asp Ile 230 235 Asn Asp Glu Gln Thr Leu Pro Arg Leu Ile Glu Ala Leu Glu Lys Arg 245 250 His Asn Leu Arg Gln Met Met Ile Asp Glu Phe Asn Lys Gln Ser Asn 265 Ala Phe Lys Ala Leu Leu Gln Glu Phe Asp Asn Ala Val Leu Ser Lys 280 Glu Asn His Met Gln Gly Lys Leu Asn Glu Lys Glu Lys Met Ile Ser 300 Gly Gln Lys Leu Glu Ile Glu Arg Leu Glu Lys Lys Asn Lys Thr Leu 315 Glu Tyr Lys Ile Glu Ile Leu Glu Lys Thr Thr Thr Ile Tyr Glu Glu 325 330 Asp Lys Arg Asn Leu Gln Gln Glu Leu Glu Thr Gln Asn Gln Lys Leu

340 345 Gln Arg Gln Phe Ser Asp Lys Arg Arg Leu Glu Ala Arg Leu Gln Gly 360 Met Val Thr Glu Thr Thr Met Lys Trp Glu Lys Glu Cys Glu Arg Arg 375 380 Val Ala Ala Lys Gln Leu Glu Met Gln Asn Lys Leu Trp Val Lys Asp 390 395 Glu Lys Leu Lys Gln Leu Lys Ala Ile Val Thr Glu Pro Lys Thr Glu 405 410 Lys Pro Glu Arg Pro Ser Arg Glu Arg Asp Arg Glu Lys Val Thr Gln 420 425 Arg Ser Val Ser Pro Ser Pro Val Pro Leu Leu Phe Gln Pro Asp Gln 435 440 Asn Ala Pro Pro Ile Arg Leu Arg His Arg Arg Ser Arg Ser Ala Gly 460 455 Asp Arg Trp Val Asp His Lys Pro Ala Ser Asn Met Gln Thr Glu Thr 470 475 Val Met Gln Pro His Val Pro His Ala Ile Thr Val Ser Val Ala Asn 485 490 Glu Lys Ala Leu Ala Lys Cys Glu Lys Tyr Met Leu Thr His Gln Glu 505 Leu Ala Ser Asp Gly Glu Ile Glu Thr Lys Leu Ile Lys Gly Asp Ile 520 525 Tyr Lys Thr Arg Gly Gly Gln Ser Val Gln Phe Thr Asp Ile Glu 535 540 Thr Leu Lys Gln Glu Ser Pro Asn Gly Ser Arg Lys Arg Arg Ser Ser 550 555 Thr Val Ala Pro Ala Gln Pro Asp Gly Ala Glu Ser Glu Trp Thr Asp 565 570 Val Glu Thr Arg Cys Ser Val Ala Val Glu Met Arg Ala Gly Ser Gln 585 590 Leu Gly Pro Gly Tyr Gln His His Ala Gln Pro Lys Arg Lys Lys Pro 600 605 608

<210> 1152 <211> 111 <212>Amino acid <213> Homo sapiens

<400> 1152

Pro Phe Ser Ser Ser Val Ser Ser Lys Gly Ser Asp Pro Phe Gly 1 5 10 Thr Leu Asp Pro Phe Gly Ser Gly Ser Phe Asn Ser Ala Glu Gly Phe 20 25 Ala Asp Phe Ser Gln Met Ser Lys Gly Lys Ser Thr Pro Val Ser Gln 40 Leu Gly Ser Ala Asp Phe Pro Glu Ala Pro Asp Pro Phe Gln Pro Leu 55 60 Gly Ala Asp Ser Gly Asp Pro Phe Gln Ser Lys Lys Gly Phe Gly Asp 75 Pro Phe Ser Gly Lys Asp Pro Phe Val Pro Ser Ser Ala Ala Lys Pro 90 . Ser Lys Ala Ser Ala Ser Gly Phe Ala Asp Phe Thr Ser Val Ser 105

<210> 1153

<211> 444 <212>Amino acid <213> Homo sapiens

<400> 1153 Met Ser Leu Met Val Val Ser Met Ala Cys Val Gly Leu Phe Leu Val 10 Gln Arg Ala Gly Pro His Met Gly Gly Gln Asp Lys Pro Phe Leu Ser Ala Trp Pro Ser Ala Val Val Pro Arg Gly Gly His Val Thr Leu Arg 40 Cys His Tyr Arg His Arg Phe Asn Asn Phe Met Leu Tyr Lys Glu Asp 55 Arg Ile His Ile Pro Ile Phe His Gly Arg Ile Phe Gln Glu Ser Phe 75 Asn Met Ser Pro Val Thr Thr Ala His Ala Gly Asn Tyr Thr Cys Arg 85 90 Gly Ser His Pro His Ser Pro Thr Gly Trp Ser Ala Pro Ser Asn Pro 105 Val Val Ile Met Val Thr Gly Asn His Arg Lys Pro Ser Leu Leu Ala 120 His Pro Gly Pro Leu Val Lys Ser Gly Glu Arg Val Ile Leu Gln Cys 135 140 Trp Ser Asp Ile Met Phe Glu His Phe Phe Leu His Lys Glu Gly Ile 150 155 Ser Lys Asp Pro Ser Arg Leu Val Gly Gln Ile His Asp Gly Val Ser 165 170 Lys Ala Asn Phe Ser Ile Gly Pro Met Met Gln Asp Leu Ala Gly Thr 185 Tyr Arg Cys Tyr Gly Ser Val Thr His Ser Pro Tyr Gln Leu Ser Ala 200 205 Pro Ser Asp Pro Leu Asp Ile Val Ile Thr Gly Leu Tyr Glu Lys Pro 215 220 Ser Leu Ser Ala Gln Pro Gly Pro Thr Val Leu Ala Gly Glu Ser Val 230 235 Thr Leu Ser Cys Ser Ser Arg Ser Ser Tyr Asp Met Tyr His Leu Ser 245 250 Arg Glu Gly Glu Ala His Glu Arg Arg Phe Ser Ala Gly Pro Lys Val 265 Asn Gly Thr Phe Gln Ala Asp Phe Pro Leu Gly Pro Ala Thr His Gly 280 Gly Thr Tyr Arg Cys Phe Gly Ser Phe Arg Asp Ser Pro Tyr Glu Trp 295 Ser Asn Ser Ser Asp Pro Leu Leu Val Ser Val Thr Gly Asn Pro Ser 310 315 Asn Ser Trp Pro Ser Pro Thr Glu Pro Ser Ser Glu Thr Gly Asn Pro 330 Arg His Leu His Val Leu Ile Gly Thr Ser Val Val Ile Ile Leu Phe 345 Ile Leu Leu Phe Phe Leu Leu His Arg Trp Cys Ser Asn Lys Lys 360 Asn Ala Ala Val Met Asp Gln Glu Ser Ala Gly Asn Arg Thr Ala Asn 375 380 Ser Glu Asp Ser Asp Glu Gln Asp Pro Gln Glu Val Thr Tyr Thr Gln 390 395 Leu Asn His Cys Val Phe Thr Gln Arg Lys Ile Thr Arg Pro Ser Gln 405 410 Arg Pro Lys Thr Pro Pro Thr Asp Ile Ile Val Tyr Thr Glu Leu Pro 425 Asn Ala Glu Ser Arg Ser Lys Val Val Ser Cys Pro

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PCT/US00/35017

435 440 444

<210> 1154 <211> 522 <212>Amino acid <213> Homo sapiens

<400> 1154 Met Ser Leu Arg Val His Thr Leu Pro Thr Leu Leu Gly Ala Val Val 10 Arg Pro Gly Cys Arg Glu Leu Leu Cys Leu Leu Met Ile Thr Val Thr 25 Val Gly Pro Gly Ala Ser Gly Val Cys Pro Thr Ala Cys Ile Cys Ala Thr Asp Ile Val Ser Cys Thr Asn Lys Asn Leu Ser Lys Val Pro Gly Asn Leu Phe Arg Leu Ile Lys Arg Leu Asp Leu Ser Tyr Asn Arg Ile 70 Gly Leu Leu Asp Ser Glu Trp Ile Pro Val Ser Phe Ala Lys Leu Asn 85 90 Thr Leu Ile Leu Arg His Asn Asn Ile Thr Ser Ile Ser Thr Gly Ser 100 105 Phe Ser Thr Thr Pro Asn Leu Lys Cys Leu Asp Leu Ser Ser Asn Lys 120 Leu Lys Thr Val Lys Asn Ala Val Phe Gln Glu Leu Lys Val Leu Glu 135 140 Val Leu Leu Tyr Asn Asn His Ile Ser Tyr Leu Asp Pro Ser Ala 150 155 Phe Gly Gly Leu Ser Gln Leu Gln Lys Leu Tyr Leu Ser Gly Asn Phe 170 Leu Thr Gln Phe Pro Met Asp Leu Tyr Val Gly Arg Phe Lys Leu Ala 180 185 Glu Leu Met Phe Leu Asp Val Ser Tyr Asn Arg Ile Pro Ser Met Pro 195 .200 Met His His Ile Asn Leu Val Pro Gly Lys Gln Leu Arg Gly Ile Tyr 215 Leu His Gly Asn Pro Phe Val Cys Asp Cys Ser Leu Val Ser Leu Leu 230 235 240 Val Phe Trp Tyr Arg Arg His Phe Ser Ser Val Met Asp Phe Lys Asn 250 255 245 Asp Tyr Thr Cys Arg Leu Trp Ser Asp Ser Arg His Ser Arg Gln Val 265 270 Leu.Leu Leu Gln Asp Ser Phe Met Asn Cys Ser Asp Ser Ile Ile Asn 280 285 Gly Ser Phe Arg Ala Leu Gly Phe Ile His Glu Ala Gln Val Gly Glu 295 Arg Leu Met Val His Cys Asp Ser Lys Thr Gly Asn Ala Asn Thr Asp 310 315 Phe Ile Trp Val Gly Pro Asp Asn Arg Leu Leu Glu Pro Asp Lys Glu 330 Met Glu Asn Phe Tyr Val Phe His Asn Gly Ser Leu Val Ile Glu Ser 340 345 Pro Arg Phe Glu Asp Ala Gly Val Tyr Ser Cys Ile Ala Met Asn Lys 355 . 360 Gln Arg Leu Leu Asn Glu Thr Val Asp Val Thr Ile Asn Val Ser Asn 375 Phe Thr Val Ser Arg Ser His Ala His Glu Ala Phe Asn Thr Ala Phe 390 395 Thr Thr Leu Ala Ala Cys Val Ala Ser Ile Val Leu Val Leu Leu Tyr

405 410 Leu Tyr Leu Thr Pro Cys Pro Cys Lys Cys Lys Thr Lys Arg Gln Lys 425 Asn Met Leu His Gln Ser Asn Ala His Ser Ser Ile Leu Ser Pro Gly 440 Pro Ala Ser Asp Ala Ser Ala Asp Glu Arg Lys Ala Gly Ala Gly Lys 455 Arg Val Val Phe Leu Glu Pro Leu Lys Asp Thr Ala Ala Gly Gln Asn 470 475 Gly Lys Val Arg Leu Phe Pro Ser Glu Ala Val Ile Ala Glu Gly Ile 490 Leu Lys Ser Thr Arg Gly Lys Ser Asp Ser Asp Ser Val Asn Ser Val 505 Phe Ser Asp Thr Pro Phe Val Ala Ser Thr 520

<210> 1155 <211> 642 <212>Amino acid <213> Homo sapiens

<400> 1155 Ala Ser Asp Phe Ile Arg Ser Leu Asp His Cys Gly Tyr Leu Ser Leu 10 Glu Gly Val Phe Ser His Lys Phe Asp Phe Glu Leu Gln Asp Val Ser 20 25 Ser Val Asn Glu Asp Val Leu Leu Thr Thr Gly Leu Leu Cys Lys Tyr 40 Thr Ala Gln Arg Phe Lys Pro Lys Tyr Lys Phe Phe His Lys Ser Phe 60 Gln Glu Tyr Thr Ala Gly Arg Arg Leu Ser Ser Leu Leu Thr Ser His Glu Pro Glu Glu Val Thr Lys Gly Asn Gly Tyr Leu Gln Lys Met Val 85 Ser Ile Ser Asp Ile Thr Ser Thr Tyr Ser Ser Leu Leu Arg Tyr Thr 105 Cys Gly Ser Ser Val Glu Ala Thr Arg Ala Val Met Lys His Leu Ala 120 Ala Val Tyr Gln His Gly Cys Leu Leu Gly Leu Ser Ile Ala Lys Arg 135 Pro Leu Trp Arg Gln Glu Ser Leu Gln Ser Val Lys Asn Thr Thr Glu 150 155 Gln Glu Ile Leu Lys Ala Ile Asn Ile Asn Ser Phe Val Glu Cys Gly 170 Ile His Leu Tyr Gln Glu Ser Thr Ser Lys Ser Ala Leu Ser Gln Glu 185 Phe Glu Ala Phe Phe Gln Gly Lys Ser Leu Tyr Ile Asn Ser Gly Asn 200 Ile Pro Asp Tyr Leu Phe Asp Phe Phe Glu His Leu Pro Asn Cys Ala 215 220 Ser Ala Leu Asp Phe Ile Lys Leu Gly Phe Tyr Gly Gly Ala Met Ala 230 235 Ser Trp Glu Lys Ala Ala Glu Asp Thr Gly Gly Ile His Met Glu Glu 245 250 Ala Pro Glu Thr Tyr Ile Pro Ser Arg Ala Val Ser Leu Phe Phe Asn 265 Trp Lys Gln Glu Phe Arg Thr Leu Glu Val Thr Leu Arg Asp Phe Ser 280 Lys Leu Asn Lys Gln Asp Ile Arg Tyr Leu Gly Lys Ile Phe Ser Ser

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290
                       295
Ala Thr Ser Leu Arg Leu Gln Ile Lys Arg Cys Ala Gly Val Ala Gly
                  310
                                      315
Ser Leu Ser Leu Val Leu Ser Thr Cys Lys Asn Ile Tyr Ser Leu Met
              325
                                  330
Val Glu Ala Ser Pro Leu Thr Ile Glu Asp Glu Arg His Ile Thr Ser
                              345
Val Thr Asn Leu Lys Thr Leu Ser Ile His Asp Leu Gln Asn Gln Arg
                          360
                                 . 365
Leu Pro Gly Gly Leu Thr Asp Ser Leu Gly Asn Leu Lys Asn Leu Thr
                       375
                                        380
Lys Leu Ile Met Asp Asn Ile Lys Met Asn Glu Glu Asp Ala Ile Lys
                   390
                                      395
Leu Ala Glu Gly Leu Lys Asn Leu Lys Lys Met Cys Leu Phe His Leu
               405
                                   410
Thr His Leu Ser Asp Ile Gly Glu Gly Met Asp Tyr Ile Val Lys Ser
                               425
Leu Ser Ser Glu Pro Cys Asp Leu Glu Glu Ile Gln Leu Val Ser Cys
                           440
Cys Leu Ser Ala Asn Ala Val Lys Ile Leu Ala Gln Asn Leu His Asn
                       455
                                          460
Leu Val Lys Leu Ser Ile Leu Asp Leu Ser Glu Asn Tyr Leu Glu Lys
                   470
                                      475
Asp Gly Asn Glu Ala Leu His Glu Leu Ile Asp Arg Met Asn Val Leu
               485
                                   490
Glu Gln Leu Thr Ala Leu Met Leu Pro Trp Gly Cys Asp Val Gln Gly
          500
                               505
Ser Leu Ser Ser Leu Leu Lys His Leu Glu Glu Val Pro Gln Leu Val
                          520
                                              525
Lys Leu Gly Leu Lys Asn Trp Arg Leu Thr Asp Thr Glu Ile Arg Ile
                      535
                                          540
Leu Gly Ala Phe Phe Gly Lys Asn Pro Leu Lys Asn Phe Gln Gln Leu
                  550
                                      555
Asn Leu Ala Gly Asn Arg Val Ser Ser Asp Gly Trp Leu Ala Phe Met
               565
                                  570
Gly Val Phe Glu Asn Leu Lys Gln Leu Val Phe Phe Asp Phe Ser Thr
                              585
Lys Glu Phe Leu Pro Asp Pro Ala Leu Val Arg Lys Leu Ser Gln Val
                          600
Leu Ser Lys Leu Thr Phe Leu Gln Glu Ala Arg Leu Val Gly Trp Gln
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Phe Asp Asp Asp Leu Ser Val Ile Thr Gly Ala Phe Lys Leu Val
                  630
Thr Ala
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<211> 125

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<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(125)

<223> X = any amino acid or stop code
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<210> 1157
<211> 91
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(91)
<223> X = any amino acid or stop code

<210> 1158
<211> 254
<212>Amino acid
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<220>
<221> misc_feature
<222> (1)...(254)
<223> X = any amino acid or stop code

Gly Ser Leu Tyr Thr Val Leu Glu Glu Pro Ser Asn Ala Tyr Gly Leu 40 Pro Glu Ser Glu Phe Leu Ile Val Leu Arg Asp Val Val Gly Gly Met 55 Asn His Leu Arg Glu Asn Gly Ile Val His Arg Asp Ile Lys Pro Gly Asn Ile Met Arg Val Ile Gly Glu Asp Gly Gln Ser Val Tyr Lys Leu Thr Asp Phe Gly Ala Ala Arg Glu Leu Glu Asp Asp Glu Gln Phe Val 100 105 Ser Leu Tyr Gly Thr Glu Glu Tyr Leu His Pro Asp Met Tyr Glu Arg 120 Ala Val Leu Arg Lys Asp His Gln Lys Lys Tyr Gly Ala Thr Val Asp 135 Leu Trp Ser Ile Gly Val Thr Phe Tyr Gln Gly Lys Pro Thr Gly Ser 150 155 Leu Ala Ile Xaa His Pro Phe Glu Gly Ala Ser Val Arg Asn Lys Ala 165 170 Ser Asp Gly Ile Lys Ile Ile Thr Gly Lys Gly Leu Leu Gly Ala Ile 180 185 Ser Gly Val Gln Lys Ser Lys Lys Asn Gly Pro Ile Asp Trp Glu Trp 200 Glu Asp Met Pro Val Ser Cys Ser Pro Ser Ser Gly Val Leu Arg Val 215 220 Pro Asn Leu Pro Pro Val Leu Ala Asn Ile Leu Glu Ser Arg Ser Arg 230 235 Lys Lys Cys Trp Gly Phe Xaa Pro Ser Phe Leu Gln Glu Asn 250

<210> 1159 <211> 162 <212>Amino acid <213> Homo sapiens

<400> 1159 Gly Ser Thr Ile Ser Cys Glu Arg Ser Leu Arg Ser Leu Trp Thr Ala 10 His Trp Ala Leu Pro Glu Met Asp Ser Arg Ile Pro Tyr Asp Asp Tyr 25 Pro Val Val Phe Leu Pro Ala Tyr Glu Asn Pro Pro Ala Trp Ile Pro Pro His Glu Arg Val His His Pro Asp Tyr Asn Asn Glu Leu Thr Gln Phe Leu Pro Arg Thr Ile Thr Leu Lys Lys Pro Pro Gly Ala Gln Leu 70 Gly Phe Asn Ile Arg Gly Gly Lys Ala Ser Gln Leu Gly Ile Phe Ile 90 Ser Lys Val Ile Pro Asp Ser Asp Ala His Arg Ala Gly Leu Gln Glu 105 Gly Asp Gln Val Leu Ala Val Asn Asp Val Asp Phe Gln Asp Ile Glu 120 His Ser Lys Ala Val Glu Ile Leu Lys Thr Ala Arg Glu Ile Ser Met 135 140 Arg Val Arg Phe Phe Pro Tyr Asn Tyr His Arg Gln Lys Glu Arg Thr 150 155 Val His 162

<210> 1160 <211> 295 <212>Amino acid <213> Homo sapiens

<400> 1160 His Glu Gln Val Ser Ala Leu His Arg Arg Ile Lys Ala Ile Val Glu 5 10 Val Ala Ala Met Cys Gly Val Asn Ile Ile Cys Phe Gln Glu Ala Trp 20 Thr Met Pro Phe Ala Phe Cys Thr Arg Glu Lys Leu Pro Trp Thr Glu Phe Ala Glu Ser Ala Glu Asp Gly Pro Thr Thr Arg Phe Cys Gln Lys Leu Ala Lys Asn His Asp Met Val Val Val Ser Pro Ile Leu Glu Arg 75 Asp Ser Glu His Gly Asp Val Leu Trp Asn Thr Ala Val Val Ile Ser 90 Asn Ser Gly Ala Val Leu Gly Lys Thr Arg Lys Asn His Ile Pro Arg 105 Val Gly Asp Phe Asn Glu Ser Thr Tyr Tyr Met Glu Gly Asn Leu Gly 120 125 His Pro Val Phe Gln Thr Gln Phe Gly Arg Ile Ala Val Asn Ile Cys 135 Tyr Gly Arg His His Pro Leu Asn Trp Leu Met Tyr Ser Ile Asn Gly 150 155 Ala Glu Ile Ile Phe Asn Pro Ser Ala Thr Ile Gly Ala Leu Ser Glu 165 170 Ser Leu Trp Pro Ile Glu Ala Arg Asn Ala Ala Ile Ala Asn His Cys 180 185 Phe Thr Cys Ala Ile Asn Arg Val Gly Thr Glu His Phe Pro Asn Glu 200 205 Phe Thr Ser Gly Asp Gly Lys Lys Ala His Gln Asp Phe Gly Tyr Phe 215 220 Tyr Gly Ser Ser Tyr Val Ala Ala Pro Asp Ser Ser Arg Thr Pro Gly 230 235 Leu Ser Arg Ser Arg Asp Gly Leu Leu Val Ala Lys Leu Asp Leu Asn 245 250 Leu Cys Gln Gln Val Asn Asp Val Trp Asn Phe Lys Met Thr Gly Arg 260 · 265 270 Tyr Glu Met Tyr Ala Arg Glu Leu Ala Glu Ala Val Lys Ser Asn Tyr 280 Ser Pro Thr Ile Val Lys Glu

<210> 1161 <211> 1621 <212>Amino acid <213> Homo sapiens <220> <221> misc_feature <222> (1)...(1621)

<223> X = any amino acid or stop code

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Tyr Gly Val Phe Pro Leu Arg Gly Lys Ile Leu Asn Val Arg Glu Ala

Ser His Lys Gln Ile Met Glu Asn Ala Glu Ile Asn Asn Ile Ile Lys Ile Val Gly Leu Gln Tyr Lys Lys Ser Tyr Asp Asp Ala Gln Ser Leu Lys Thr Leu Arg Tyr Gly Lys Ile Met Ile Met Thr Asp Gln Asp Gln Asp Gly Ser His Ile Lys Gly Leu Leu Ile Asn Phe Ile His His Asn Trp Pro Ser Leu Leu Lys His Gly Phe Leu Glu Glu Phe Ile Thr Pro Ile Val Lys Ala Ser Lys Asn Lys Gln Glu Leu Ser Phe Tyr Ser Ile Pro Glu Phe Asp Glu Trp Lys Lys His Ile Glu Asn Gln Lys Ala Trp Lys Ile Lys Tyr Tyr Lys Gly Leu Gly Thr Ser Thr Ala Lys Glu Ala Lys Glu Tyr Phe Ala Asp Met Glu Arg His Arg Ile Leu Phe Arg Tyr Ala Gly Pro Glu Asp Asp Ala Ala Ile Thr Leu Ala Phe Ser Lys Lys Lys Ile Asp Asp Arg Lys Glu Trp Leu Thr Asn Phe Met Glu Asp Arg Arg Gln Arg Arg Leu His Gly Leu Pro Glu Gln Phe Leu Tyr Gly Thr Ala Thr Lys His Leu Thr Tyr Asn Asp Phe Ile Asn Lys Glu Leu Ile Leu Phe Ser Asn Ser Asp Asn Glu Arg Ser Ile Pro Ser Leu Val Asp Gly Phe Lys Pro Gly Gln Arg Lys Val Leu Phe Thr Cys Phe Lys Arg Asn Asp Lys Arg Glu Val Lys Val Ala Gln Leu Ala Gly Ser Val Ala Glu Met Ser Ala Tyr His His Gly Glu Gln Ala Leu Met Met Thr Ile Val Asn Leu Ala Gln Asn Phe Val Gly Ser Asn Asn Ile Asn Leu Leu Gln Pro Ile Gly Gln Phe Gly Thr Arg Leu His Gly Gly Lys Asp Ala Ala Ser Pro Arg Tyr Ile Phe Thr Met Leu Ser Thr Leu Ala Arg Leu Leu Phe Pro Ala Val Asp Asp Asn Leu Leu Lys Phe Leu Tyr Asp Asp Asn Gln Arg Val Glu Pro Glu Trp Tyr Ile Pro Ile Ile Pro Met Val Leu Ile Asn Gly Ala Glu Gly Ile Gly Thr Gly Trp Ala Cys Lys Leu Pro Asn Tyr Asp Ala Arg Glu Ile Val Asn Asn Val Arg Arg Met Leu Asp Gly Leu Asp Pro His Pro Met Leu Pro Asn Tyr Lys Asn Phe Lys Gly Thr Ile Gln Glu Leu Gly Gln Asn Gln Tyr Ala Val Ser Gly Glu Ile Phe Val Val Asp Arg Asn Thr Val Glu Ile Thr Glu Leu Pro Val Arg Thr Trp Thr Gln Val Tyr Lys Glu Gln Val Leu Glu Pro Met Leu Asn Gly Thr Asp Lys Thr Pro Ala Leu Ile Ser Asp Tyr Lys Glu Tyr His Thr Asp Thr Thr Val Lys Phe Val Val Lys Met Thr Glu Glu Lys Leu Ala Gln Ala Glu Ala Gly Leu His Lys Val Phe Lys Leu Gln Thr Thr Leu Thr Cys Asn Ser Met Val Leu Phe Asp His Met Gly Cys

1015 Leu Lys Lys Tyr Glu Thr Val Gln Asp Ile Leu Lys Glu Phe Phe Asp . 1030 1035 Leu Arg Leu Ser Tyr Tyr Gly Leu Arg Lys Glu Trp Leu Val Gly Met 1050 1055 1045 Leu Gly Ala Glu Phe Thr Lys Leu Asn Asn Gln Ala Arg Phe Ile Leu 1065 1060 1070 Glu Lys Ile Gln Gly Lys Ile Thr Ile Xaa Asn Arg Ser Lys Lys Asp 1080 1085 Leu Ile Gln Met Leu Val Gln Arg Gly Tyr Glu Ser Asp Pro Val Lys - **1090** 1095 1100 Ala Trp Lys Glu Ala Gln Glu Lys Ala Ala Glu Glu Asp Glu Thr Gln 1110 1115 Asn Gln His Asp Asp Ser Ser Ser Asp Ser Gly Thr Pro Ser Gly Pro 1125 1130 1135 Asp Phe Asn Tyr Ile Leu Asn Met Ser Leu Trp Ser Leu Thr Lys Glu 1145 1140 1150 Lys Val Glu Glu Leu Ile Lys Gln Arg Asp Ala Lys Gly Arg Glu Val 1155 1160 1165 Asn Asp Leu Lys Arg Lys Ser Pro Ser Asp Leu Trp Lys Glu Asp Leu 1175 1180 Ala Ala Phe Val Glu Glu Leu Asp Lys Val Glu Ser Gln Glu Arg Glu 1190 1195 Asp Val Leu Ala Gly Met Ser Gly Lys Ala Ile Lys Gly Lys Val Gly 1205 1210 1215 Lys Pro Lys Val Lys Lys Leu Gln Leu Glu Glu Thr Met Pro Ser Pro 1220 1225 1230 Tyr Gly Arg Arg Ile Ile Pro Glu Ile Thr Ala Met Lys Ala Asp Ala 1235 1245 1240 Ser Lys Lys Leu Leu Lys Lys Lys Gly Asp Leu Asp Thr Ala Ala 1250 1255 1260 Val Lys Val Glu Phe Asp Glu Glu Phe Ser Gly Ala Pro Val Glu Gly 1270 1275 Ala Gly Glu Glu Ala Leu Thr Pro Ser Val Pro Ile Asn Lys Gly Pro 1285 1290 1295 Lys Pro Lys Arg Glu Lys Lys Glu Pro Gly Thr Arg Val Arg Lys Thr 1300 1305 1310 Pro Thr Ser Ser Gly Lys Pro Ser Ala Lys Lys Val Lys Lys Arg Asn 1315 1320 1325 Pro Trp Ser Asp Asp Glu Ser Lys Ser Glu Ser Asp Leu Glu Glu Thr . 1330 1335 1340 Glu Pro Val Val Ile Pro Arg Asp Ser Leu Leu Arg Arg Ala Ala Ala 1345 1350 1355 Glu Arg Pro Lys Tyr Thr Phe Asp Phe Ser Glu Glu Glu Asp Asp Asp 1365 1370 1375 Ala Asp Asp Asp Asp Asp Asp Asn Asn Asp Leu Glu Glu Leu Lys Val 1380 1385 Lys Ala Ser Pro Ile Thr Asn Asp Gly Glu Asp Glu Phe Val Pro Ser 1395 1400 1405 Asp Gly Leu Asp Lys Asp Glu Tyr Thr Phe Ser Pro Gly Lys Ser Lys 1410 1415 1420 Ala Thr Pro Glu Lys Ser Leu His Asp Lys Lys Ser Gln Asp Phe Gly 1430 1435 Asn Leu Phe Ser Phe Pro Ser Tyr Ser Gln Lys Ser Glu Asp Asp Ser 1445 1450 1455 Ala Lys Phe Asp Ser Asn Glu Glu Asp Ser Ala Ser Val Phe Ser Pro 1460 1465 1470 Ser Phe Gly Leu Lys Gln Thr Asp Lys Val Pro Ser Lys Thr Val Ala 1475 1480 1485 Ala Lys Lys Gly Lys Pro Ser Ser Asp Thr Val Pro Lys Pro Lys Arg 1500 1490 1495 Ala Pro Lys Gln Lys Lys Val Val Glu Ala Val Asn Ser Asp Ser Asp 1510 1515 Ser Glu Phe Gly Ile Pro Lys Lys Thr Thr Thr Pro Lys Gly Lys Gly

1525 1530 1535

Arg Gly Ala Lys Lys Arg Lys Ala Ser Gly Ser Glu Asn Glu Gly Asp 1540 1545 1550

Tyr Asn Pro Gly Arg Lys Thr Ser Lys Thr Thr Ser Lys Lys Pro Lys 1555 1565

Lys Thr Ser Phe Asp Gln Asp Ser Asp Val Asp Ile Phe Pro Ser Asp 1570 1575 1580

Phe Pro Thr Glu Pro Pro Ser Leu Pro Arg Thr Gly Arg Ala Arg Lys 1585 1590 1595 1600

Glu Val Lys Tyr Phe Ala Glu Ser Asp Glu Glu Glu Asp Asp Val Asp 1605

Phe Ala Met Phe Asn 16201621

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<210> 1163 <211> 336 <212>Amino acid <213> Homo sapiens

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Phe Arg Arg Gly Asp Glu Leu Thr Gln His Gln Arg Phe His Thr Gly 105 Glu Lys Asp Tyr Glu Cys Lys Asp Cys Gly Lys Thr Phe Ser Arg Val 120 125 Tyr Lys Leu Ile Gln His Lys Arg Ile His Ser Gly Glu Lys Pro Tyr 135 140 Glu Cys Lys Asp Cys Gly Lys Ala Phe Ile Cys Gly Ser Ser Leu Ile 150 155 Gln His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Gln Glu 165 170 Cys Gly Lys Ala Phe Thr Arg Val Asn Tyr Leu Thr Gln His Gln Lys 185 Ile His Thr Gly Glu Lys Pro His Glu Cys Lys Glu Cys Gly Lys Ala 200 Phe Arg Trp Gly Ser Ser Leu Val Lys His Glu Arg Ile His Thr Glv 215 Glu Lys Pro Tyr Lys Cys Thr Glu Cys Gly Lys Ala Phe Asn Cys Gly 230 235 Tyr His Leu Thr Gln His Glu Arg Ile His Thr Gly Glu Thr Pro Tyr 245 250 Lys Cys Lys Glu Cys Gly Lys Ala Phe Ile Tyr Gly Ser Ser Leu Val 265 Lys His Glu Arg Ile His Thr Gly Val Lys Pro Tyr Gly Cys Thr Glu 280 285 Cys Gly Lys Ser Phe Ser His Gly His Gln Leu Thr Gln His Gln Lys 295 300 Thr His Ser Gly Ala Lys Ser Tyr Glu Cys Lys Glu Cys Gly Lys Ala 310 315 Cys Asn His Leu Asn His Leu Arg Glu His Gln Arg Ile His Asn Ser 325 335 336

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115 118

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<213> Homo sapiens
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<223> X = any amino acid or stop code

<400> 1165 Xaa Leu Asp Pro Asp Thr Leu Pro Ala Val Ala Thr Leu Leu Met Asp 10 Val Met Phe Tyr Ser Asn Gly Val Lys Asp Pro Met Ala Thr Gly Asp 20 25 Asp Cys Gly His Ile Arg Phe Phe Ser Phe Ser Leu Ile Glu Gly Tyr 40 Ile Ser Leu Val Met Asp Val Gln Thr Gln Gln Arg Phe Pro Ser Asn 55 Leu Leu Phe Thr Ser Ala Ser Gly Glu Leu Trp Lys Met Val Arg Ile 70 Gly Gly Gln Pro Leu Gly Phe Gly Pro Val Trp Glu Ser Gly Pro Thr 90 Gly Pro Thr Ser Pro Leu Ile Leu Pro Val Thr Pro Ser Ser His 100 105 Arg Gln Ala Ala Ser Gln Val Thr Thr Thr Lys Gln Gly Gln Trp Leu 120 Cys Leu Lys Arg Pro Ser Ala Arg Ser Pro Asp His Thr Ala Cys Leu 130 135 Gly * 145

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<213> Homo sapiens

<220>
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65 70 75 80 Lys Ser Ile Lys 84

<210> 1167
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<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(112)
<223> X = any amino acid or stop code

<210> 1168 <211> 319 <212>Amino acid <213> Homo sapiens ... <220> <221> misc_feature <222> (1)...(319) <223> X = any amino acid or stop code

85 90 Ser Ala Gly Val Leu Gly Cys Arg Trp Gly Ser Ser Gly Lys Ser His 105 Ser Leu Ser Pro Ser Arg Lys Gly Asn Leu His Leu Leu Ser Gln Glu 120 Pro Gln Thr Thr Val Val His Asn Ala Thr Asp Gly Ile Lys Gly Ser 135 140 Thr Glu Ser Cys Asn Thr Thr Thr Glu Asp Glu Asp Leu Lys Val Arg 150 155 Lys Gln Glu Ile Ile Lys Ile Thr Glu Gln Leu Ile Glu Ala Ile Asn 165 170 Asn Gly Asp Phe Glu Ala Tyr Thr Lys Ile Cys Asp Pro Gly Leu Thr 180 185 190 Ser Phe Glu Pro Glu Ala Leu Gly Asn Leu Val Glu Gly Met Asp Phe 200 His Lys Phe Tyr Phe Glu Asn Arg Glu Trp Val Arg Ala Ala Asp Ile 215 220 Leu Leu Pro Ala Pro Leu Pro Leu Cys Leu Cys Leu Leu Leu Thr Phe 230 235 Ser Ser Gln Leu Pro Thr Phe Pro Leu Phe Asp Leu Arg Ala Ala Leu 245 250 Leu Leu Cys Met Leu Val Pro Leu Cys Pro Asp Gly Cys Arg Gln Ala 260 265 270 Pro Leu Lys Ala Leu Leu Ser Ser Lys Cys His Ser Phe Cys Ser 280 Cys Phe Val Ala Val Pro Val Thr Thr Ile Lys Leu Thr Tyr Phe Leu 295 300 Pro Gly Ala Val Ala Tyr Ala Cys Asn Pro Asn Thr Leu Gly Gly 310 315

<210> 1169 <211> 96 <212>Amino acid <213> Homo sapiens

 400> 1169

 Glu Arg Ala Gly Ala Gly Gly Ala Ala Ala Cys Arg Ala Gly Thr Arg

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 15

 Ser Gly Ala Thr Ser Arg Thr Pro Trp Pro Leu His Arg Gln Leu Ser
 30

 Met Met Leu Met Leu Ala Gln Ser Asn Pro Gln Leu Phe Ala Leu Met
 35
 40
 45

 Gly Thr Arg Ala Gly Ile Ala Arg Glu Leu Glu Arg Val Glu Gln Gln
 50
 55
 60

 Ser Arg Leu Glu Gln Leu Ser Ala Ala Glu Leu Gln Ser Arg Asn Gln
 75
 80

 Gly His Trp Ala Asp Trp Leu Gln Ala Tyr Arg Ala Arg Leu Gly Gln
 90
 95
 96

<210> 1170 <211> 145 <212>Amino acid <213> Homo sapiens <220> <221> misc feature